ANNUAL SUMMARY, 1894.

INTRODUCTION.

The present annual summary completes the discussion of the meteorology of India for the year 1894.

It should be noted that in the monthly reviews it is attempted to present the facts and data from two different points of view. Meteorological data in India are chiefly utilised for the following purposes :—

1st, in the discussion of the prevalence and spread of diseases, more especially of cholera and other diseases of an epidemic character;

2nd, in connection with agricultural questions, more especially the progress and character of the crops as determined by the weather conditions of the period.

India has hence been divided into two groups of divisions from what may be termed the medical and agricultural stand-points. For the comparison of medical and meteorological statistics, India is arranged into the following provinces, which are believed to be fairly homogeneous so far as the conditions of the prevalence of the more common diseases are concerned :—

(1) Burma Coast and Bay Islands.
(2) Burma Inland.
(3) Assam.
(4) Bengal and Orissa.
(5) Gangetic Plain and Chota Nagpur.
(6) Upper Sub-Himalayas, including the submontane districts of the North-Western Provinces and the Punjab, and the North and Central Punjab.
(7) Indus Valley and West Rajputana.
(8) East Rajputana, Central India, and Gujarat.
(9) Deccan.
(10) West Coast.
(11) South India.

The data for each of these divisions are given in Table I in larger figures, and the portion of each monthly review entitled "Summary of the chief features of the weather in India during the month" is intended to give a sketch of the broader and more important features of the weather in India for the use of those who study the relations between the prevalence and spread of diseases and the weather conditions prevailing at the time in India.

According to the second method of arrangement into meteorological divisions, India is divided into 52 meteorological districts, or divisions, or areas from the agricultural stand-point, each of which is fairly homogeneous so far as the distribution of rainfall and the general character of the crops and the conditions of their growth are concerned. The following gives the two series of divisions arranged under the respective political areas or provinces to which they belong:—

Political division or province.	Meteorological division.	Meteorological province.
BURMA	Tenasserim	Burma Coast and Bay Islands.
	Lower Burma	
	Arakan	
	Central Burma	Burma Inland.
	Upper Burma	
ASSAM	Assam (Surma)	Assam.
	„ (Brahmaputra)	
BENGAL	East Bengal	Bengal and Orissa.
	Deltaic Bengal	
	Central Bengal	
	North Bengal	
	Orissa	
	Chota Nagpur	Gangetic Plain and Chota Nagpur.
	Bihar, South	
	„ North	
NORTH-WESTERN PROVINCES AND OUDH.	North-Western Provinces, East	
	Oudh, North	
	„ South	
	North-Western Provinces. Himalayas	
	North-West Provinces, Sub-montane	Upper Sub-Himalayas.
PUNJAB	Punjab, Central	
	„ Sub-montane	
	„ North	
	Punjab, West	Indus Valley and North-West Rajputana.
	Sind and Cutch	
RAJPUTANA	Rajputana, West	
	„ East	
	Kathiawar	
CENTRAL INDIA	Central India	
BOMBAY	Gujarat	
NORTH-WESTERN PROVINCES.	North-Western Provinces, West	
BOMBAY	Bombay Deccan	Deccan.
	Khandesh	
BERAR	Berar	
CENTRAL PROVINCES.	Central Provinces, West	Deccan.
	„ „ Central	
	„ „ East.	

National Oceanic and Atmospheric Administration

Environmental Data Rescue Program

ERRATA NOTICE

One or more conditions of the original document may affect the quality of the image, such as:

Discolored pages
Faded or light ink
Binding intrudes into the text

This document has been imaged through the NOAA Environmental Data Rescue Program. To view the original document, please contact the NOAA Central Library in Silver Spring, MD at (301) 713-2607 x124 or www.reference@nodc.noaa.gov.

Information Manufacturing Corporation
Imaging Subcontractor
Rocket Center, West Virginia
September 14, 1999

Political division or province.	Meteorological division.	Meteorological province.
HYDERABAD OR THE NIZAM'S DOMINIONS.	Hyderabad, North.	Deccan.
	„ South.	
BOMBAY.	Konkan.	West Coast.
	Malabar.	
MADRAS.	Madras, South.	South India.
	„ South Central.	
	„ East Coast, South.	
	„ Central.	
	Madras, East Coast North.	
COORG AND MYSORE.	Coorg, Mysore.	

The double grouping is shown in Plate I at the end of this part.

The data of Table I in the monthly reviews and in the present annual part are obtained, with a few exceptions, from the observations telegraphed daily to Simla for publication in the Daily Weather Report. In the case of thermometric observations, they are telegraphed to the nearest half degree. Hence the maximum and minimum temperature data of the second class observatories derived from these telegraphic reports given in that table occasionally differ to some slight extent from the means of the more exact data (recorded to tenths of a degree) tabulated in the observation forms sent into the Calcutta Office, and which are used in the calculation of the mean temperature data in Table II. There is also another reason why the mean maximum and minimum data in Tables I and II differ to a slight extent. In Table I the daily or 24 hours period is assumed to end at 8 A.M., and in Table II at 4 P.M., and hence the maximum temperature in Table I for any month of thirty-one days at any station gives the mean for thirty-one periods of 24 hours ending at 8 A.M. of the 31st, and in Table II for the same number of 24 hours periods ending at 4 P.M. on the 31st, and hence virtually of a monthly period one day in advance of the former. Similarly for months of 28, 29 or 30 days. These remarks will explain some of the slight discrepancies which may be found between the maxima and minima temperature mean data in Tables I and II, and hence also in the monthly mean variation data given in these tables in the monthly reviews and annual summary.

The methods of exposure of the instruments at observatories in India, and of the reduction of the observations and the calculation of mean data, have been fully stated and explained in the Annual Reports on the Meteorology of India, and need not be repeated. The reader is referred more especially to the Annual Report of the year 1885 and to the "Instructions to Observers of the Indian Meteorological Department" recently issued for full information on this subject.

Temperature.

The methods of exposing the thermometer at observatories in India and of deducing the daily and monthly means from the observed readings of the instruments are described in pages 18-19 of the Annual Report for 1890.

The variations of the mean temperature of each month from the normal given in Table II of the monthly reviews are deduced by a comparison of the actual monthly means with the normal monthly means obtained by the same methods given in Table XII of average monthly temperatures of 88 stations in India and Ceylon, etc., in pages 19 to 22 of the Annual Report for the year 1890. Average data for 134 stations will also be found in pages 39 to 42 of the Annual Report for the year 1887.

In Table I published in each monthly review, as in the Daily Weather Report, the mean temperature of the day is calculated by the formula, daily mean $= \frac{\text{maximum}+\text{minimum}}{2}$. It differs from the true daily mean by amounts varying slightly with the season. The variations of the daily or monthly means obtained by this method from normal daily or monthly means similarly calculated, usually differ very little from those obtained by the more laborious computation of true daily means and the comparison of these with normal true daily means. In Table I the variations of the monthly mean maximum and minimum temperature from the normal as well as the variations of the monthly mean temperature (*i.e.*, $\frac{\text{maximum}+\text{minimum}}{2}$) are given.

Normal monthly mean maximum and minimum temperatures of 94 stations calculated from the observations of the eleven years period 1878—1888 were given in the Annual Summary for 1891. The additional data for the years 1889—93 have been recently utilized to furnish what are probably slightly more accurate means than those given in the 1891 Annual Summary: The re-calculated means are given in the three following tables. Table I gives the monthly mean maximum temperatures and the annual mean maximum temperatures for 135 stations in India. Table II gives similar information for the minimum temperature, and Table III gives the normal mean daily range of temperature for each month of the year and for the whole year at the same stations.

These averages are derived from observations of the same period of 16 years (1878—93) for all the stations, with the exception of those named in the following small table,

whichalso states the number of years for which trustworthy temperature observations were available and utilized in each case :—

Station.	Period for which trustworthy data are available.	Station.	Period for which trustworthy data are available.
Dhubri	1881-93.	Midnapore	1883-93.
Motihari	1883-93.	Balasore	ditto.
Chapra	ditto.	Bhagalpur	ditto.
Arrah	ditto.	Naya Dumka	ditto.
Buxar	ditto.	Jalpaiguri	ditto.
Dehri	ditto.	Rangpur	ditto.
Ranchi	ditto.	Dinajpur	ditto.
Chaibassa	ditto.	Malda	1888-93.
Raniganj	ditto.	Bogra	1885-93.
Bankura	1885-93.	Rampur Boalia	1883-93.

Station.	Period for which trustworthy data are available.	Station.	Period for which trustworthy data are available.
Mymensingh	1883-93.	Sambhar	1880-93.
Sirajganj	ditto.	Mangalore	ditto.
Faridpur	ditto.	Rajahmundry	1884-93.
Krishnagar	1885-93.	Mercara	1880-93.
Barisal	1883-93.	Calicut	ditto.
Noakhali	ditto.	Kurnool	1885-93.
Comilla	ditto.	Darjeeling	1882-93.
Bickaneer	1880-93.	Cuddapah	1884-93.
Jeypore	1881-93.	Kindat	1887-93.

TABLE I.—*Average monthly maximum temperatures of 133 stations in India, etc.*

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Moulmein	88·3	91·3	93·9	94·3	90·0	84·3	82·7	83·2	84·5	88·2	88·3	87·2	88·0
Toungoo	85·3	90·7	97·7	100·1	96·2	88·4	86·4	86·3	88·6	89·7	87·0	84·0	90·0
Rangoon	88·7	92·4	96·3	98·0	92·5	86·2	85·0	84·9	85·5	87·2	87·3	87·3	89·3
Bassein	85·4	89·5	94·3	95·9	92·0	86·1	84·8	84·4	85·3	87·0	85·9	84·4	87·9
Diamond Island	83·9	84·1	85·7	88·8	89·0	85·5	84·5	84·4	84·8	86·4	85·7	84·3	85·6
Akyab	81·4	84·6	88·9	91·9	90·5	85·9	84·6	84·4	86·6	87·9	85·5	81·9	86·2
Thayetmyo	85·4	92·4	99·7	103·0	99·4	91·0	88·8	88·8	89·7	90·1	87·5	84·4	91·7
Kindat	75·8	81·5	89·9	96·5	95·7	90·6	89·2	88·8	89·2	87·4	82·0	75·7	86·9
Silchar	77·2	79·9	85·3	87·6	88·0	88·7	90·0	89·2	89·7	88·8	84·7	79·5	85·7
Sibsagar	69·9	72·7	79·2	82·6	86·3	89·7	90·8	89·8	88·6	85·1	78·4	71·7	82·1
Dhubri	73·5	77·1	86·5	88·1	85·9	85·6	87·4	86·5	85·8	85·0	80·0	74·6	83·0
Chittagong	77·8	81·5	86·2	88·6	88·0	86·2	85·5	85·2	86·6	86·4	82·8	77·9	84·4
Noakhali	77·3	79·7	85·8	88·8	88·5	86·6	85·2	85·2	86·2	86·2	82·7	77·9	84·2
Comilla	78·2	80·9	88·1	91·3	90·0	88·2	87·2	87·1	88·2	87·8	83·5	79·0	85·8
Sirajganj	75·8	79·0	88·9	94·4	90·4	89·0	87·8	86·8	87·6	87·1	82·1	76·7	85·5
Narayanganj	78·2	83·7	90·0	93·2	90·8	89·0	88·3	87·7	88·5	88·0	83·7	78·4	86·6
Barisal	76·5	80·0	87·9	91·2	91·1	89·0	86·6	86·3	87·5	87·5	82·2	77·2	85·3
Mymensingh	74·5	77·8	86·5	90·4	88·3	87·2	87·5	87·2	87·6	86·8	82·3	76·5	84·4
Faridpur	74·1	77·7	85·6	92·9	90·9	88·9	87·2	86·5	86·9	86·2	81·2	74·5	84·4

TABLE I.—*Average monthly maximum temperatures of 133 stations in India, etc.*—contd.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Jessore	78·0	83·1	92·5	97·3	94·2	91·6	89·4	88·7	89·1	88·6	83·3	77·8	87·8
Calcutta	76·9	81·6	90·4	95·4	93·5	91·3	88·0	87·1	87·4	86·6	81·2	76·1	86·3
Saugor Island	76·6	80·9	87·2	90·8	91·5	90·7	87·8	87·2	87·8	86·8	81·4	75·8	85·4
Krishnagar	77·8	81·5	91·3	98·5	96·5	93·2	89·5	88·9	88·8	88·4	82·7	77·7	87·9
Midnapore	81·0	84·6	94·3	102·3	99·8	95·2	89·8	88·8	89·3	88·9	83·4	79·6	89·8
Bankura	78·6	82·2	92·9	102·4	100·1	95·4	89·7	88·5	89·1	88·7	83·0	77·7	88·2
Raniganj	78·1	81·7	93·2	102·4	100·6	95·9	90·0	89·0	89·4	89·0	83·5	78·0	89·2
Burdwan	78·5	83·2	93·6	100·6	97·2	94·1	90·2	89·2	89·5	88·7	82·7	77·7	88·8
Naya Dumka	75·7	79·7	91·4	100·1	98·4	94·0	88·6	87·7	88·2	87·4	81·4	75·7	87·4
Berhampore	76·8	81·9	92·8	100·2	95·7	92·6	89·4	88·5	88·8	87·7	81·8	76·5	87·7
Rampur Boalia	75·3	78·7	89·3	96·3	93·7	91·5	88·9	87·8	88·2	87·6	81·7	76·1	86·3
Malda	76·2	79·5	90·3	97·1	96·0	92·4	90·0	89·5	89·3	88·2	82·7	76·9	87·3
Bogra	75 7	79·1	89·5	95·6	92·2	89·3	88·6	87·9	88·0	86·9	82·1	76·9	86·0
Dinajpur	75·3	78·4	89·2	94·6	91·1	89·2	89·1	88·7	88·5	87·4	82·4	76·6	85·9
Rangpur	74·5	77·2	87·3	91·4	88·9	88·4	89·4	89·1	88·4	87·3	82·2	76·2	85·0
Jalpaiguri	73·1	74·9	85·0	89·0	87·6	87·5	88·2	87·8	87·3	86·3	81·7	75·3	83·6
Balasore	80·1	83·5	91·1	97·4	95·6	92·6	88·4	87·3	87·6	87·8	82·7	78·8	87·7
False Point	78·8	82·6	87·6	90·6	91·1	90·8	87·6	87·0	87·8	87·3	81·9	77·3	85·9
Cuttack	84·6	90·0	96·8	102·3	101·4	95·9	89·8	89·3	89·8	89·9	85·0	82·0	91·4
Hazaribagh	72·8	77·7	88·7	98·2	98·3	92·5	84·5	83·6	84·4	83·1	76·7	71·6	84·3
Ranchi	73·7	76·8	87·1	97·5	98·0	91·8	83·7	82·9	83·2	82·7	76·4	72·0	83·8
Chaibassa	80·2	83·7	94·1	104·1	103·4	97·0	89·2	88·6	88·7	88·1	82·5	78·1	89·8
Gaya	75·7	81·3	93·7	103·6	104·1	99·9	91·4	90·1	90·8	89·3	82·4	75·8	89·8
Dehri	75·0	78·6	91·3	103·1	105·2	99·9	89·9	88·3	88·4	89·0	83·0	76·3	89·0
Patna	72·7	78·0	91·1	100·9	99·6	96·6	90·3	89·3	90·2	88·3	81·4	74·1	87·7
Arrah	73·5	77·8	91·3	100·9	101·6	97·3	90·4	89·5	89·8	88·7	82·6	74·6	88·2
Buxar	73·6	77·7	90·4	100·0	101·5	97·0	89·4	88·4	88·9	88·4	82·3	74·7	87·7
Purnea	74·7	78·8	90·2	97·2	94·5	92·3	90·2	89·2	88·9	87·5	81·9	75·9	86·8
Bhagalpur	74·1	77·7	90·0	97·2	96·3	92·7	89·5	88·6	88·7	87·5	81·4	74·9	86·6
Darbhanga	72·2	76·2	87·7	96·3	95·4	92·3	89·3	88·4	88·2	86·3	80·8	74·1	85·6
Motihari	73·0	76·4	88·6	97·2	96·7	93·7	90·3	89·2	89·6	87·8	82·1	75·0	86·6
Chapra	73·4	77·3	89·5	99·7	100·3	96·1	90·8	89·1	89·7	88·1	81·9	74·6	87·5
Benares	74·4	80·4	93·3	103·5	104·6	101·0	91·4	89·4	90·9	89·9	81·9	74·9	89·7
Allahabad	74·0	79·7	93·3	104·0	106·2	102·4	91·4	89·8	90·8	89·9	82·1	75·0	89·9
Gorakhpur	73·2	78·0	90·8	100·8	100·5	97·7	90·9	90·1	90·4	88·7	81·6	74·3	88·1
Lucknow	73·8	78·5	91·4	102·3	104·1	101·5	92·0	90·6	91·7	90·9	82·9	75·5	89·6
Bareilly	70·3	74·9	87·6	99·5	102·5	100·7	91·2	90·0	90·3	89·2	80·9	72·7	87·5

TABLE I.—*Average monthly maximum temperatures of 133 stations in India, etc.*—contd.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Dehra Dun	65·6	68·8	79·4	90·2	93·7	93·4	85·3	83·9	84·3	81·7	74·2	68·3	80·7
Roorkee	69·5	73·2	85·8	98·1	102·1	101·4	92·9	90·7	91·2	89·1	80·4	72·5	87·2
Meerut	70·1	74·4	86·9	98·4	101·9	101·4	92·9	90·6	91·6	90·0	81·0	73·0	87·7
Delhi	71·0	75·1	88·2	100·4	104·3	104·2	94·0	91·6	92·6	91·8	83·0	74·3	89·2
Lahore	67·4	70·5	83·7	96·6	102·8	105·6	98·6	96·0	96·7	93·2	81·3	71·5	88·7
Ludhiana	67·6	71·5	85·2	97·6	104·2	105·8	97·9	95·3	94·8	91·9	80·4	71·3	88·6
Sialkot	66·6	69·3	81·8	94·9	102·4	105·6	97·6	94·0	95·3	92·0	80·6	70·2	87·5
Rawalpindi	63·3	64·4	76·7	88·0	97·2	102·7	97·4	93·5	93·4	88·0	76·7	67·6	84·1
Peshawar	63·9	65·7	76·7	86·6	98·1	105·5	102·7	99·0	95·7	88·4	77·0	67·8	85·6
D. I. Khan	69·1	71·7	84·0	94·3	103·3	107·7	103·6	101·5	100·6	94·1	81·9	73·0	90·4
Mooltan	69·8	72·9	86·3	97·8	104·7	106·7	103·2	100·3	99·7	95·0	84·1	73·7	91·2
Sirsa	70·9	75·1	85·7	100·5	106·2	106·5	100·0	97·5	98·2	95·9	84·3	74·9	91·3
Jacobabad	73·3	77·1	91·1	102·1	110·4	111·9	107·4	103·6	103·0	98·0	85·9	76·6	95·0
Hyderabad	76·5	80·0	93·3	101·9	106·8	103·2	98·8	95·3	97·2	97·4	87·2	78·6	93·0
Kurrachee	76·6	79·0	86·0	89·5	92·9	93·4	90·1	87·7	88·3	91·2	87·0	80·0	86·8
Bhuj	80·1	83·8	93·7	100·2	101·5	97·2	90·1	88·5	91·7	95·7	88·3	82·0	91·1
Bickaneer	71·8	75·2	89·4	100·6	106·4	106·0	100·1	96·3	97·9	95·6	83·9	75·2	91·5
Jeypore	73·7	77·9	90 0	100·5	105·5	102·8	91·8	89·9	92·8	93·2	84·6	77·6	90·0
Sambhar	72·4	76·4	88·2	99·1	104·3	101·7	91·9	89·2	91·6	91·6	82·5	75·3	88·7
Ajmere	74·0	77·3	89·3	98·6	103·2	100·3	90·9	87·5	90·4	91·4	83·1	76·2	88·5
Deesa	82·7	85·7	95·9	102·9	106·2	101·6	91·3	88·3	92·3	96·0	90·4	85·1	93·2
Rajkot	84·2	87·5	96·3	102·2	105·4	99·9	90·1	88·7	90·9	95·2	89·9	85·4	93·0
Nowgong	75·3	80·3	93·3	103·8	107·3	102·5	90·0	88·3	90·5	90·4	82·0	75·2	89·9
Indore	78·9	82·5	92·6	100·2	102·4	94·2	84·0	82·6	84·8	87·1	81·8	78·5	87·5
Neemuch	77·4	80·5	91·9	100·4	103·9	98·4	86·9	84·5	87·4	89·9	83·4	77·9	88·5
Surat	86·3	89·5	96·1	100·2	98·2	93·7	87·1	86·9	88·2	92·3	89·9	86·7	91·3
Agra	73·5	78·2	91·5	102·8	106·7	104·8	92·9	90·4	92·2	92·9	84·0	76·0	90·5
Jhansi	76·0	80·5	93·1	103·8	107·4	103·2	90·7	88·5	90·9	92·4	84·1	78·1	90·7
Belgaum	83·1	88·6	93·8	96·4	93·1	80·7	75·6	76·1	78·5	82·4	81·6	81·2	84·3
Sholapur	87·3	93·8	100·5	105·2	104·3	94·3	88·8	88·4	88·0	89·1	86·9	84·9	92·6
Poona	85·1	90·8	97·1	101·1	98·5	88·5	81·8	81·7	83·8	87·5	85·2	83·4	88·7
Malegaon	85·1	89·8	97·3	102·8	103·7	94·5	86·7	86·1	87·1	89·6	85·7	83·4	91·0
Akola	84·4	90·3	98·8	105·7	107·1	97·5	88·1	87·1	88·3	90·1	85·9	82·0	92·1
Amraoti	84·2	89·7	98·3	105·3	107·2	96·7	86·8	86·4	87·7	89·4	85·2	81·7	91·6
Khandwa	83·4	88·5	97·5	104·3	106·1	97·3	87·0	85·7	87·4	89·9	85·3	81·7	91·2
Hoshangabad	80·2	85·2	96·1	104·9	107·5	98·0	86·1	85·2	88·0	89·1	83·4	78·8	90·2
Nagpur	83·0	89·1	98·5	105·7	108·7	97·8	87·1	87·3	88·8	89·4	84·0	80·3	91·6

TABLE I.—*Average monthly maximum temperatures of 133 stations in India, etc.*—contd.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Chanda	84·9	91·6	100·2	107·1	109·2	97·7	87·6	87·8	88·8	89·4	84·4	81·6	92·5
Seoni	79·0	83·9	93·5	101·3	103·2	93·6	83·5	83·3	85·3	86·0	80·6	77·2	87·5
Jubbulpore	77·2	81·9	93·1	101·8	104·9	96·7	85·6	84·8	87·0	86·8	80·8	76·0	88·1
Saugor	76·6	80·6	92·3	101·5	104·7	98·5	85·0	83·5	86·0	86·8	80·7	75·9	87·7
Raipur	81·0	86·8	96·5	104·3	106·5	96·7	86·1	86·2	87·5	87·8	82·1	78·3	90·0
Sutna	74·6	79·2	91·6	101·6	104·7	98·8	86·8	85·7	87·2	87·4	80·1	74·7	87·7
Sambalpur	82·0	87·9	97·0	104·9	106·4	97·3	87·3	87·5	89·0	88·7	83·2	79·3	90·9
Hyderabad (Deccan)	84·1	91·0	97·7	102·2	102·9	93·3	86·1	86·1	86 3	86 8	82·9	81·6	90·1
Bombay	82·3	82·5	85·6	88·2	90·0	87·3	84·2	83·9	84·3	87·3	86·5	84·1	85·5
Ratnagiri	87·4	86·3	87·7	89·9	90·9	86·2	83·7	83·4	83·9	88 2	90·4	89·3	87·3
Karwar	86·5	86·2	87·8	89 8	89·7	84·9	83·0	82·1	82·6	85·0	86·9	87·2	86·0
Cochin	88·6	89·5	90·6	91·1	89·2	84·5	83·3	83·2	84·3	85·7	86·9	87·9	87·1
Calicut	87·5	88·8	90·5	91·3	89·8	83·9	82·1	82·7	84·2	85·8	87·1	87·5	86·8
Mangalore	87·8	87·8	88·9	90·8	89·8	84·4	82·7	82·4	83·2	85·1	87·2	88·5	86·6
Madura	87·9	92·1	96·9	100·1	100·1	98·7	97·3	96·5	95·8	91·7	87 3	86·0	94·2
Salem	88·2	93·4	98·4	101·1	98·8	94·3	92·6	91·4	91·4	89·3	86·9	86·0	92·7
Coimbatore	86·6	92·0	96·3	98·1	94 8	89·8	88·0	88·5	89·5	88·0	85·9	84·7	90·2
Mercara	76·4	81·2	84·5	84·5	80·9	72·1	68·7	70·5	72·4	75·4	75·0	74·5	76·3
Bangalore	79·3	85·2	90·3	93·2	91·2	84·6	81·8	81·7	81·9	81·0	78·5	77·5	83·9
Negapatam	81·8	84·2	88·7	92·6	96·1	96·6	94·9	92·9	92·2	87·9	83·7	81·0	89·4
Trichinopoly	87·2	92·0	97·5	101·1	101·1	98·5	97·0	96·0	95·3	90·8	86·7	84·5	94·0
Madras	84·6	86·7	89·9	93·0	97·6	98·0	95·1	93·7	93·2	89·0	85·0	83·6	90·8
Masulipatam	83·3	86·8	91·4	94 9	99·2	97·5	92·1	91·3	91·3	89·0	84·7	82·5	90·3
Cuddapah	88·3	94·4	101·2	105·1	105·2	98·7	93·9	92·7	92·5	89·9	86·6	84·8	94·3
Kurnool	87·6	94·4	100·7	104·6	104·3	95·6	90·4	89·1	89·3	89·3	86·6	85·4	93·3
Bellary	87·5	94·1	100·3	103·9	102·4	94·7	90·9	90·8	90·6	89·4	86·3	85·3	93·0
Rajahmundry	86·7	91·7	95·9	100·4	102·6	97·3	88·9	89·4	90·3	89 4	86·6	85·5	92·1
Cocanada	79·3	83·8	89·6	94·9	96 9	94·2	88·2	88·3	88·5	86·0	81·8	79·1	87·6
Vizagapatam	79·0	82·5	86·2	88·8	90·3	90·0	87·5	87·5	87·3	85·7	81·4	78·0	85·4
Quetta	51·5	52·1	64·5	73·6	82·9	90·6	92·6	90·0	85·2	74·8	63·8	57·1	73·3
Murree	47·9	47·5	58·7	68·4	75·9	82·0	77·2	74·1	73·8	69·2	61·0	53·7	65·8
Simla	41·9	47·0	56·9	66·8	71·6	75·3	69·3	67·4	67·7	62·6	55·6	46·8	60·7
Chakrata	50·6	50·9	61·9	70·6	73·8	74·9	69·9	69·2	69·0	66·7	59·4	55·9	64·4
Mussooree	...	...	...	...	75·6	76·0	69·9	68·8	68·0	64·2	58·2	52·6	?
Ranikhet	54·2	55·2	65·1	74·4	76·9	78·0	73·7	72·4	72 3	69·2	62·4	58·2	67·7
Darjeeling	45·0	46·2	56·7	61·4	62 7	65·2	66·8	66·0	64·8	60·8	54·5	48·9	58·3
Mount Abu	67·0	68·9	78·5	85·6	88·6	83·3	74·6	71·9	75·4	78·9	73·3	68·9	76·2

TABLE I.—*Average monthly maximum temperatures of 133 stations in India, etc.*—concld.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Pachmarhi	70·9	75·1	84·5	92·3	94·6	85·6	75·4	74·8	77·0	77·3	72·0	69·2	79·1
Wellington	66·5	70·4	73·7	75·9	75·6	71·8	70·8	70·8	71·0	68·5	66·8	56·6	70·6
Aden	81·6	82·4	85·2	90·0	93·7	94·0	92·6	91·9	93·6	91·2	86·2	82·6	88·8

TABLE II.—*Average monthly minimum temperatures of 133 stations in India, etc.*

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Moulmein	65·6	67·5	72·3	75·8	75·7	74·5	73·9	73·9	74·1	74·4	71·1	66·5	72·1
Tongoo	57·6	60·2	67·5	73·3	76·4	75·2	74·9	74·9	75·4	74·5	70·3	62·6	70·2
Rangoon	63·9	65·2	70·9	75·9	77·2	76·4	75·7	75·7	75·9	75·6	72·9	67·7	72·8
Bassein	61·0	63·9	70·2	75·1	76·9	76·2	75·7	75·6	75·5	75·0	71·8	65·3	71·9
Diamond Island . . .	70·3	71·8	74·7	78·1	78·5	75·8	75·0	75·2	75·3	76·2	74·9	72·0	74·8
Akyab	59·5	60·9	68·8	75·7	77·8	77·9	77·4	77·2	78·0	76·8	71·9	64·4	72·2
Thayetmyo	53·6	56·0	66·2	75·4	77·5	76·4	76·1	76·0	75·7	74·0	68·0	58·9	69·5
Kindat	52·3	53·3	60·1	66·4	73·5	76·2	76·5	76 1	74·8	71·2	64·6	55·3	66·7
Silchar	52·3	55·0	63·4	68·9	72·1	76·1	77·1	76·7	76·3	72·4	63·8	55·2	67·4
Sibsagar	49·8	53·1	60·1	66·4	71·5	76·6	78·1	77·8	76·5	70·9	59·8	50·5	65·9
Dhubri	53·6	54·7	64·5	70·6	72·8	76·4	78·6	78·2	77·0	73·0	63·6	55·9	68·2
Chittagong	55·4	58·5	67·7	73·5	75·1	76·5	76·4	76·0	76·2	73·7	66·3	58·4	69·5
Noakhali	52·7	56·2	67·4	74·4	75·7	77·3	77·4	77·1	77·1	73·5	64·4	54·8	69·0
Comilla	53·0	55·8	67·3	72·9	74·8	76·6	76·8	76 5	76·5	73·3.	64·5	54·6	68·6
Sirajganj	51·0	52·1	63·5	71·6	73·9	76·8	78·4	78·6	77·9	72·6	62·1	53·4	67·7
Narayanganj	55·0	57·8	68·4	74·3	75·5	78·3	79·2	78·9	78·7	75·1	65·9	57·3	70·4
Barisal	55·0	58·1	69·2	74·9	76·6	77·8	78·1	77·9	77·7	74·4	65·4	56·2	70·1
Mymensingh	52·4	53·6	64·1	71·8	73·5	76·5	78·1	77 6	77 1	73·1	63·2	54·0	67·3
Faridpur	53·0	55·1	67·3	73·0	74·9	77·5	78·5	78·7	78·4	74 2	64·5	55·5	69·2
Jessore	53·2	56·6	68·3	75·1	76·4	78·9	79·1	78·7	78·4	74·9	64·2	55·2	69·9
Calcutta	55·4	59·8	69·7	75·7	76·9	78·3	78·4	78·1	77 8	74·4	64·6	56·1	70·4
Saugor Island . . .	59·4	65·1	75·0	79·8	80·5	81·9	80·4	79·6	79·4	76·1	67·0	59·1	73·0
Krishnagar	51·7	54·0	66·3	74·5	76·3	78·5	78·3	78·1	77·5	73·0	63·0	53·4	68·7
Midnapore	55·3	59·5	69·4	76·1	77·7	78·8	78·2	77·7	77·2	72·9	62·4	54·7	70·0
Bankura	54·9	58·1	68·2	76·1	77·8	79·1	78·1	77·8	77·2	73·0	62·9	54·7	69·8
Raniganj	54·2	56·9	67·4	75·2	77·5	79·0	78·2	77·8	77·1	72·5	61·3	53·9	69·3

TABLE II.—*Average monthly minimum temperatures of 133 stations in India, etc.*—contd.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Burdwan	54·7	58·1	68·5	75·6	77·2	79·5	79·4	78·9	78·7	74·7	64·1	55·9	70·4
Naya Dumka	51·2	54·2	65·6	74·6	77·2	78·7	77·6	77·1	76·3	70·6	59·5	51·3	67·8
Berhampore	53·3	55·9	66·0	74·4	76·0	78·5	78·7	78·5	78·4	74·5	64·1	55·3	69·5
Rampur Boalia	50·5	52·8	64·1	72·8	75·2	77·2	78·2	78·0	77·3	72·5	62·2	52·7	67·8
Malda	50·4	51·9	61·7	71·0	75·3	78·4	79·0	79·4	78·2	71·9	61·1	51·9	67·5
Bogra	51·6	53·3	63·6	71·9	74·2	77·0	78·2	78·0	77·2	72·3	62·2	53·6	67·8
Dinajpur	49·2	51·2	61·5	70·4	73·7	77·0	78·9	78·4	77·5	72·1	60·3	51·3	66·8
Rangpur	49·3	50·4	60·6	69·0	72·1	75·7	78·2	77·4	76·8	71·4	60·2	51·3	66·0
Jalpaiguri	50·7	50·8	59·2	67·6	71·1	74·8	76·6	76·1	75·3	69·2	59·6	52·4	65·3
Balasore	55·7	60·2	69·8	76·1	77·9	78·6	78·3	77·8	77·5	73·1	62·4	54·4	70·2
False Point	58·9	64·3	72·2	77·7	79·2	80·2	78·4	78·2	78·0	74·7	65·7	57·3	72·1
Cuttack	59·9	65·1	72·7	78·0	79·5	80·2	78·5	78·2	77·9	74·5	66·1	58·3	72·4
Hazaribagh	50·5	53·9	63·9	72·2	74·3	75·9	73·5	72·9	72·1	66·8	57·7	50·2	65·3
Ranchi	50·1	53·2	63·1	71·6	73·9	74·7	72·5	71·9	70·8	65·4	56·0	49·6	64·4
Chaibassa	53·5	56·9	67·2	75·8	78·8	79·5	77·3	76·6	75·7	70·3	60·0	52·0	69·5
Gaya	51·5	55·8	66·2	74·4	78·1	79·5	78·6	78·5	77·9	70·9	59·1	51·1	68·5
Dehri	52·9	55·5	64·1	75·2	78·8	80·8	78·9	78·2	77·8	70·7	60·0	52·8	68·9
Patna	49·9	52·6	63·6	73·3	77·2	80·1	79·7	79·5	79·1	72·5	59·9	51·1	68·2
Arrah	49·5	51·1	62·8	72·7	77·6	80·0	79·2	78·9	77·8	70·2	58·2	49·9	67·3
Buxar	50·4	52·5	64·1	73·7	78·3	80·3	78·9	78·5	77·4	70·8	58·9	50·8	67·9
Purnea	47·9	50·7	60·4	69·6	73·6	76·9	78·5	77·9	77·3	71·2	58·8	49·4	65·0
Bhagalpur	50·3	53·0	63·8	72·6	75·9	78·3	78·8	78·6	77·5	71·2	59·2	50·8	67·5
Darbhanga	52·1	53·7	63·2	71·8	75·8	79·0	79·8	79·1	78·8	73·4	62·0	54·0	68·6
Motihari	46·6	48·0	58·1	68·4	73·8	77·2	78·3	78·0	76·7	68·6	55·5	47·3	64·7
Chapra	50·2	52·0	62·6	72·1	76·8	79·3	79·1	78·8	77·9	71·1	59·0	51·4	67·5
Benares	48·0	51·4	62·3	72·2	78·5	82·3	79·6	78·8	77·5	68·7	55·5	47·8	66·9
Allahabad	47·7	50·9	62·2	72·1	78·7	82·9	79·3	78·5	76·8	67·6	54·4	47·4	66·5
Gorakhpur	48·9	51·9	62·5	72·4	76·7	79·8	79·5	78·9	77·9	70·2	57·5	50·2	67·2
Lucknow	46·4	50·3	60·6	71·0	76·7	81·5	79·3	78·5	76·3	65·6	51·8	45·6	65·3
Bareilly	46·1	48·8	59·0	68·7	75·4	79·9	78·7	78·0	75·9	65·2	52·2	45·4	64·4
Dehra Dun	44·7	46·7	55·3	64·3	69·9	74·6	74·2	73·2	70·3	60·8	51·4	45·5	60·9
Roorkee	44·3	47·2	56·4	66·6	74·0	78·9	78·1	77·8	73·6	61·5	49·2	43·4	62·5
Meerut	44·6	47·5	57·8	67·9	75·0	80·8	79·6	78·3	74·7	62·7	49·5	43·9	63·5
Delhi	48·0	51·5	62·1	73·3	79·2	83·4	80·5	79·1	76·6	68·0	55·4	48·5	67·1
Lahore	41·4	43·9	55·3	64·7	72·2	79·8	80·4	78·9	73·0	59·9	46·2	40·6	61·4
Ludhiana	43·7	46·4	57·2	66·7	73·8	80·1	80·0	78·7	74·9	63·5	50·0	43·3	63·2

TABLE II.—*Average monthly minimum temperatures of 133 stations in India, etc.*—contd.

Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Sialkot	42·8	45·3	55·3	66·0	73·8	80·1	79·2	77·3	73·3	61·8	48·5	42·0	62·1
Rawalpindi	37·9	40·5	50·4	59·6	67·6	74·7	76·7	75·1	68·7	55·9	42·1	36·3	67·1
Peshawar	39·4	41·5	51·7	60·7	69·4	76·6	79·2	77·8	70·0	57·4	44·1	38·2	58·8
D. I. Khan	40·6	44·1	55·4	65·6	74·2	80·6	82·2	81·1	75·1	61·4	46·2	39·8	62·2
Mooltan	42·7	46·1	58·0	67·5	75·9	82·3	83·0	82·0	77·4	64·6	51·6	43·5	64·6
Sirsa	42·5	46·0	57·1	68·1	76·0	82·9	81·3	79·5	75·0	62·5	48·0	42·3	63·4
Jacobabad	43·1	47·8	59·4	68·9	76·9	83·5	83·9	81·3	75·9	63·1	49·4	43·4	64·7
Hyderabad	51·2	54·1	64·5	72·0	78·4	81·5	80·5	78·5	76·2	70·6	59·2	52·3	68·3
Kurrachee	54·6	57·7	66·1	72·5	78·5	82·0	80·5	78·4	76·9	71·4	61·0	55·9	69·6
Bhuj	54·8	57·9	65·8	71·0	76·7	79·8	78·1	76·2	74·7	71·2	62·0	55·6	68·7
Bickaneer	50·3	53·4	65·5	76·0	82·2	84·9	82·4	80·4	79·1	72·5	59·6	52·2	69·9
Jeypore	48·4	50·0	60·9	69·3	76·2	80·1	76·9	75·0	72·5	64·5	53·0	48·1	65·1
Sambhar	46·1	48·1	59·3	70·3	78·1	81·6	78·0	75·8	73·9	64·7	51·9	45·7	64·6
Ajmere	44·9	48·4	59·2	70·3	77·7	80·0	76·7	74·5	72·9	63·0	49·4	44·3	63·4
Deesa	51·4	54·7	63·9	70·9	77·5	80·5	77·5	75·4	73·7	66·9	56·8	52·0	66·8
Rajkot	51·2	54·1	62·6	69·0	75·2	77·3	75·5	74·5	72·6	68·4	58·5	52·1	65·9
Nowgong	46·9	50·0	60·8	71·1	79·1	82·7	78·0	76·7	74·8	65·1	51·9	45·7	65·2
Indore	50·3	51·6	60·6	69·1	75·4	74·9	72·3	71·2	70·1	63·7	53·8	48·9	63·5
Neemuch	48·9	51·5	61·6	70·7	76·4	77·2	73·8	72·3	70·6	64·6	54·2	49·0	64·2
Surat	56·4	58·3	65·7	71·8	77·6	79·2	77·2	76·2	75·4	70·5	62·3	56·8	69·0
Agra	48·5	51·7	62·8	73·5	80·7	84·8	80·2	78·6	76·4	67·8	54·9	48·2	67·3
Jhansi	50·6	54·2	65·5	75·9	82·3	83·9	77·8	76·7	75·1	68·5	56·7	50·6	68·2
Belgaum	57·4	59·5	64·1	67·3	69·9	67·8	66·9	66·2	65·2	65·0	61·6	58·0	63·9
Sholapur	57·7	61·7	68·8	75·0	76·0	72·6	71·3	70·4	70·2	67·9	62·2	56·9	67·6
Poona	55·0	57·5	64·3	69·8	71·9	72·6	70·7	69·5	68·7	66·4	59·7	53·8	65·0
Malegaon	52·0	54·9	63·7	71·0	74·7	74·7	73·0	71·4	70·0	65·3	56·8	50·3	64·8
Akola	53·3	56·6	65·9	74·0	80·6	77·3	74·0	73·2	72·4	66·0	56·9	50·0	66·7
Amraoti	57·3	60·9	68·5	75·5	79·2	76·2	73·1	72·5	71·7	67·5	60·7	55·4	68·2
Khandwa	51·9	55·0	65·0	74·3	80·2	78·1	74·9	73·8	72·9	66·1	55·7	48·9	66·4
Hoshangabad	52·4	55·1	64·3	73·2	79·7	79·0	175·0	73·8	73·2	67·0	56·6	50·7	66·7
Nagpur	55·4	59·3	67·6	75·9	81·1	78·1	74·7	74·6	73·6	68·3	59·7	53·3	68·5
Chanda	54·6	58·8	67·2	76·3	81·5	79·3	75·5	75·1	74·2	68·5	59·1	51·1	68·4
Seoni	51·3	55·1	63·5	71·7	76·6	75·3	72·5	71·7	70·6	64·3	55·1	49·0	64·7
Jubbulpore	48·3	51·7	61·1	70·6	78·4	78·2	74·6	73·9	72·8	64·2	52·3	45·2	64·3
Saugor	51·4	54·2	64·4	72·4	77·6	77·1	73·5	72·5	71·0	65·2	56·0	51·0	65·5
Raipur	55·2	60·0	68·5	76·8	81·1	78·1	74·6	74·8	74·5	69·8	60·2	53·3	68·9

TABLE II.—*Average monthly minimum temperatures of 133 stations in India, etc.*—concld.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Sutna	47·3	51·0	61·0	71·0	78·1	81·0	76·7	75·7	74·3	65·6	52·8	46·2	65·1
Sambalpur	55·0	59·5	67·4	75·7	80·9	80·9	77·4	77·3	77·2	72·2	62·4	53·8	70·0
Hyderabad (Deccan)	57·9	62·7	69·5	75·1	77·9	74·0	71·2	70·7	70·4	67·8	62·1	56·6	68·0
Bombay	67·9	68·4	73·5	77·3	80·4	79·3	77·3	76·7	76·3	76·2	73·1	69·5	74·7
Ratnagiri	66·1	66·9	72·3	76·8	79·0	76·7	75·3	74·8	74·2	73·5	69·9	66·8	72·7
Karwar	65·8	67·1	73·1	77·8	79·2	75·7	74·6	74·1	73·5	73·1	69·5	66·4	72·5
Cochin	71·3	73·1	76·7	78·3	77·2	74·4	73·9	74·1	74·2	74·4	74·2	72·7	74·5
Calicut	69·2	72·5	75·9	77·8	77·3	74·3	73·5	73·7	73·9	74·1	73·1	70·4	73·8
Mangalore	69·2	71·4	75·8	78·8	78·4	74·8	74·1	73·8	73·8	74·1	72·8	70·5	74·0
Madura	68·5	69·2	72·5	76·2	76·8	76·7	76·1	75·5	75·1	73·8	72·3	70·4	73·6
Salem	63·3	64·8	70·6	75·6	75·5	73·5	72·3	71·8	71·3	70·5	68·0	65·1	70·2
Coimbatore	64·0	65·0	69·8	73·6	73·5	71·5	70·6	70·6	70·5	70·6	69·1	66·3	69·6
Mercara	55·9	57·3	61·2	64·1	64·5	63·2	62·2	62·1	61·7	62·1	60·3	57·6	61·0
Bangalore	56·6	58·9	64·3	69·2	69·1	66·6	65·6	65·5	65·0	64·9	62·0	58·6	63·9
Negapatam	70·6	71·5	75·3	78·8	79·9	78·9	77·8	77·0	76·3	75·6	73·9	71·8	75·6
Trichinopoly	66·9	67·8	72·6	77·3	78·2	78·0	77·3	76·3	75·5	74·0	71·7	69·0	73·7
Madras	67·5	67·7	72·4	77·1	80·8	80·2	78·4	77·3	77·1	75·2	72·3	69·8	74·7
Masulipatam	65·7	67·7	72·4	77·3	81·2	80·1	77·9	77·5	77·4	75·7	71·4	66·5	74·2
Cuddapah	64·2	68·2	75·0	80·6	83·3	80·0	77·4	76·5	75·9	74·1	69·3	66·0	74·2
Kurnool	58·8	63·7	72·0	78·3	80·4	76·2	74·2	73·5	73·2	71·3	64·2	59·4	70·4
Bellary	60·5	64·3	71·9	77·0	77·2	75·5	74·3	73·4	72·8	70·8	65·7	60·7	70·3
Rajahmundry	64·3	68·4	73·8	78·7	81·3	80·1	77·3	77·2	77·0	74·8	69·1	65·0	73·9
Cocanada	65·3	69·3	74·5	79·1	82·2	80·9	78·1	78·5	78·2	75·7	70·8	66·0	74·8
Vizagapatam	70·3	74·2	79·6	83·2	85·0	84·9	82·4	82·6	82·5	80·4	75·7	70·7	79·3
Quetta	29·3	31·4	39·7	46·4	52·0	59·2	65·3	61·9	50·4	39·2	30·9	28·8	44·5
Murree	35·4	33·9	43·8	52·0	58·8	64·4	62·7	61·0	58·8	53·1	45·1	40·0	50·8
Simla	36·5	36·0	44·5	52·5	57·4	60·6	60·6	59·7	57·1	50·9	43·9	40·2	50·0
Chakrata	36·0	35·7	44·0	52·0	55·9	60·0	60·1	59·4	57·1	50·7	43·4	39·6	49·5
Mussooree	...	...	...	...	57·2	60·5	60·4	59·7	57·5	51·6	44·8	40·6	...
Ranikhet	39·7	40·6	48·9	57·0	59·4	63·1	62·8	62·0	60·0	54·1	46·7	42·6	53·1
Darjeeling	34·6	34·1	43·0	47·5	50·7	55·3	57·4	56·7	55·1	49·0	41·6	36·8	46·8
Mount Abu	51·1	53·2	61·8	68·3	70·9	68·0	65·6	64·4	64·8	64·2	57·1	52·5	61·8
Pachmarhi	47·4	50·7	60·4	69·3	74·6	71·7	67·8	66·9	66·2	59·9	51·0	45·0	60·9
Wellington	45·5	46·7	52·8	56·0	58·3	58·2	58·1	57·2	55·7	55·0	52·5	49·1	53·7
Aden	72·2	73·0	74·7	77·6	80·7	83·0	81·3	80·5	82·1	77·1	73·3	72·6	77·3

TABLE III.—*Average monthly diurnal range of temperature of 133 stations in India, etc.*—contd.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Moulmein	22·7	23·8	21·6	18·5	14·3	9·8	8·8	9·3	10·4	13·8	17·2	20·7	15·9
Toungoo	27·7	30·5	30·2	26·8	19·8	13·2	11·5	11·4	13·2	15·2	16·7	21·4	19·8
Rangoon	24·8	27·2	25·4	22·1	15·3	9·8	9·3	9·2	9·6	11·6	14·4	19·6	16·5
Bassein	24·4	25·6	24·1	20·8	15·1	9·9	9·1	8·8	9·8	12·0	14 1	19·1	16·1
Diamond Island	13·6	12·3	11·0	10·7	10·5	9·7	9·5	9·2	9·5	10·2	10·8	12·3	10·8
Akyab	21·9	23·7	20·1	16·2	12·7	8·0	7·2	7·2	8·6	11·1	13·6	17·5	14·0
Thayetmyo	31·8	36·4	33·5	27·6	21·9	14·6	12·7	12·8	14·0	16·1	19·5	25·5	22·2
Kindat	23·5	28·0	29·8	30·1	22·2	14·4	12·7	12·7	14·4	16·2	17·5	20·4	20·2
Silchar	24·9	24·9	21·9	18·7	15·9	12·6	12·9	12·5	13·4	16·4	20·9	24·3	18·3
Sibsagar	20·1	19·6	19·1	16·2	14·8	13·1	12·7	12·0	12·1	14·2	18·6	21·2	16·1
Dhubri	19·9	22·4	22·0	17·5	13·1	9·2	8·8	8·3	8·8	12·0	16·4	18·7	14·8
Chittagong	22·4	23·0	18·5	15·1	12·9	9·7	9·1	9·2	10·4	12·7	16·5	19·5	14·9
Noakhali	24·6	23·5	18·4	14·4	12·8	9·3	7·8	8·1	9·1	12·7	18·3	23·1	15·2
Comilla	25·2	25·1	20·8	18·4	15·2	11·6	10·4	10·6	11·7	14·5	19·0	24·4	17·2
Sirajganj	24·8	26·9	25·4	22·8	16·5	12·2	9·4	8·2	9·7	14·5	20·0	23·3	17·8
Narayanganj	23·2	25·9	21·6	18·9	15·3	10·7	9·1	8·8	9·8	12·9	17·8	21·1	16·3
Barisal	21·5	21·9	18·7	16·3	14·5	11·2	8·5	8·4	9·8	13·1	16·8	21·0	15·1
Mymensingh	22·1	24·2	22·4	18·6	14·8	10·7	9·4	9·6	10·5	13·7	19·1	22·5	16·5
Faridpur	21·1	22·6	18·3	19·9	16·0	11·4	8·7	7·8	8·5	12·0	16·7	19·0	15·2
Jessore	24·8	26·5	24·2	22·2	17·8	12·7	10·3	10·0	10·7	13·7	19·1	22·6	17·9
Calcutta	21·5	21·8	20·7	19·7	16·6	13·0	9·6	9·0	9·6	12·2	16·6	20·0	15·9
Saugor Island	17·2	15·8	12·2	11·0	11·0	8·8	7·4	7·6	8·4	10·7	14·4	16·7	11·8
Krishnagar	26·1	27·5	25·0	24·0	20·2	14·7	11·2	10·8	11·3	15·4	19·7	24·3	19·2
Midnapore	25·7	25·1	24·9	26·2	22·1	16·4	11·6	11·1	12·1	16·0	21·0	24·9	19·8
Bankura	23·7	24·1	24·7	26·3	22·3	16·3	11·6	10·7	11·9	15·7	20·1	23·0	19·2
Raniganj	23·9	24·8	25·8	27·2	23·1	16·9	11·8	11·2	12·3	16·5	22·2	24·1	20·0
Burdwan	23·8	25·1	25·1	25·0	20·0	14·6	10·8	10·3	10·8	14·0	18·6	21·8	18·3
Naya Dumka	24·5	25·5	25·8	25·5	21·2	15·3	11·0	10·6	11·9	16·8	21·9	24·4	19·5
Berhampore	23·5	26·0	26·8	25·8	19·7	14·1	10·7	10·0	10·4	13·2	17·7	21·2	18·3
Rampur Boalia	24·8	25·9	25·2	23·5	18·5	14·3	10·7	9·8	10·9	15·1	19·5	23·4	18·5
Malda	25·8	27·6	28·6	26·1	20·7	14·0	11·0	10·1	11·1	16·3	21·6	25·0	19·8
Bogra	24·1	25·8	25·9	23·7	18·0	12·3	10·4	9·9	10·8	14·6	19·9	23·3	18·2
Dinajpur	26·1	27·2	27·7	24·2	17·4	12·2	10·2	10·3	11·0	15·3	22·1	25·3	19·1
Rangpur	25·2	26·8	26·7	22·4	16·8	12·7	11·2	11·7	11·6	15·9	22·0	24·9	19·0
Jalpaiguri	22·4	24·1	25·8	21·4	16·5	12·7	11·6	11·7	12·0	17·1	22·1	22·9	18·4
Balasore	24·4	23·3	21·3	21·3	17·7	14·0	10·1	9·5	10·1	14·7	20·3	24·4	17·0

TABLE III.—*Average monthly diurnal range of temperature of 133 stations in India, etc.*—contd.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	Year.
False Point	19·9	18·3	15·4	12·9	11·9	10·6	9·2	8·8	9·8	12·6	16·2	20·0	13·8
Cuttack	24·7	24·9	24·1	24·3	21·9	15·7	11·3	11·1	11·9	15·4	18·9	23·7	19·0
Hazaribagh	22·3	23·8	24·8	26·0	24·0	16·6	11·0	10·7	12·3	16·9	19·0	21·4	19·0
Ranchi	23·6	23·6	24·0	25·9	24·1	17·1	11·2	11·0	12·4	17·3	20·4	22·4	19·4
Chaibassa	26·7	26·8	26·9	28·3	24·6	17·5	11·9	12·0	13·0	17·8	22·5	26·1	20·3
Gaya	24·2	25·5	27·5	29·2	26·0	20·4	12·8	11·6	12·9	18·4	23·3	24·7	21·4
Dehri	22·1	23·1	27·2	27·9	26·4	19·1	11·0	10·1	10·6	18·3	23·0	23·5	20·2
Patna	22·8	25·4	27·5	27·6	22·4	16·5	10·6	9·8	11·1	15·8	21·5	23·0	19·5
Arrah	24·0	26·7	28·5	28·2	24·0	17·3	11·2	10·6	12·0	18·5	24·4	24·7	20·8
Buxar	23·2	25·2	26·3	26·3	23·2	16·7	10·5	9·9	11·5	17·6	23·4	23·9	19·8
Purnea	26·8	28·1	29·8	27·6	20·9	15·4	11·7	11·3	11·6	16·3	23·1	26·5	20 8
Bhagalpur	23·8	24·7	26·2	24·6	20·4	14·4	10·7	10·0	11·2	16·3	22·2	24·1	19·1
Darbhanga	20·1	22·5	24·5	24·5	19·6	13·3	9·5	9·3	9·4	12·9	18·8	20·1	17·0
Motihari	26·4	28·4	30·5	28·8	22·9	16·5	12·0	11·2	12·9	19·2	26·6	27·7	21·9
Chapra	23·2	25·3	26·9	27·6	23·5	16·8	11·7	10·3	11·8	17·0	22·9	23·2	20·0
Benares	26·4	29·0	31·0	31·3	26·1	18·7	11 8	10·6	13·4	21·2	26·4	27·1	22·8
Allahabad	26·3	28·8	31·1	31·9	27·5	19·5	12·1	11·3	14·0	22·3	27·7	27·6	23·3
Gorakhpur	24·3	26·1	28·3	28·4	23·8	17·9	11·4	11·2	12·5	18·5	24·1	24·1	20·9
Lucknow	27·4	28·2	30·8	31·3	27·4	20·0	12·7	12·1	15·4	25·3	31·1	29·9	24·3
Bareilly	24·1	26·1	28·6	30·8	27·1	20·8	13·0	12·0	14·4	24·0	28·7	27·3	23·1
Dehra Dun	20·9	22·1	24·1	25·9	23·8	18·8	11·1	10·7	14·0	20·9	22·8	22·8	19 8
Roorkee	25·2	26·0	29·4	31·5	28·1	22·5	13·9	13·7	17·6	27·6	31·2	29·1	24·7
Meerut	25·5	26·9	29·1	30·5	26·9	20·6	13·3	12·3	16·9	27·3	31·4	29·1	24·2
Delhi	23·0	23·6	26·1	27·1	25·1	20·8	13·5	12·5	16·0	23·8	27·6	25·8	22·1
Lahore	26·0	26·6	28·9	31·9	30·6	25·8	18·2	17·1	23·7	33·3	35·1	30·9	27·4
Ludhiana	23·9	25·1	28·0	30·9	30·4	25·7	17·9	16·6	19·9	28·4	30·4	28·0	25·4
Sialkot	23·8	24·0	26·5	28·9	28·6	25·5	18·4	16·7	22·0	30·2	32·1	28·2	25·4
Rawalpindi	25·4	23·9	26·3	28·4	29·6	28·0	20·7	18·4	24·7	32·1	34·6	31·3	27·0
Peshawar	24·5	24·2	25·0	25·9	28·7	28·9	23·5	21·2	25·7	31·0	32·9	29·6	26·8
D. I. Khan	28·5	27·6	28·6	28·7	29·1	27·1	21·4	20·4	25·5	32·7	35·7	33·2	28·2
Mooltan	27·1	26·8	28·3	30·3	28·8	24·4	20·2	18·3	22·3	30·4	32·5	30·2	26·6
Sirsa	28·4	29·1	28·6	32·4	30·2	23·6	18·7	18·0	23·2	33·4	36·3	32·6	27·9
Jacobabad	30·2	29·3	31·7	33·2	33·5	28·4	23·5	22·3	27·1	34·9	36·5	33·2	30·3
Hyderabad	25·3	25·9	28·8	29·9	28·4	21·7	18·3	16·8	21·0	26·8	28·0	26·3	24·8
Kurrachee	22·0	21·3	19·9	17·0	14·4	11·4	9·6	9·3	11·4	19·8	26·0	24·1	17·2
Bhuj	25·3	25·9	27·9	29·2	24·8	17·4	12·0	12·2	17·0	24·5	26·3	26·4	22·4

TABLE III.—*Average monthly diurnal range of temperature of 133 stations in India, etc.*—contd.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Bickaneer	21·5	21·8	23·9	24·6	24·2	21·1	17·7	15·9	18·8	23·1	24·3	23·0	21·7
Jeypore	25·3	27·9	29·1	31·2	29·3	22·7	14·9	14·9	20·3	28·7	31·6	29·5	25·5
Sambhar	26·3	28·3	28·9	28·8	26·2	20·1	13·9	13·4	18·1	26·9	30·6	29·6	24·3
Ajmere	29·1	28·9	30·1	28·3	25·5	20·3	14·2	13·0	17·5	28·4	33·7	31·9	25·1
Deesa	31·3	31·0	32·0	32·0	28·7	21·1	13·8	12·9	18·6	29·1	33·6	33·1	26·4
Rajkot	33·0	33·4	33·7	33·2	30·2	22·6	14·6	14·2	18·3	26·8	31·4	33·3	27·1
Nowgong	28·4	30·3	32·5	32·7	28·2	19·8	12·0	11·6	15·7	25·3	30·1	29·5	24·7
Indore	28·6	30·9	32·0	31·1	27·0	19·3	11·7	11·4	14·7	23·4	28·0	29·6	24·0
Neemuch . . .	28·5	29·0	30·3	29·7	27·5	21·2	13·1	12·2	16·8	25·3	29·2	28·9	24·3
Surat	29·9	31·2	30·4	28·4	20·6	14·5	9·9	10·7	12·8	21·8	27·6	29·9	22·3
Agra	25·0	26·5	28·7	29·3	26·0	20·0	12·7	11·8	15·8	25·1	29·1	27·8	23·2
Jhansi	25·4	26·3	27·6	27·9	25·1	19·3	10·7	11·8	15·8	23·9	27·4	27·5	22·4
Belgaum	25·7	29·1	29·6	29·1	25·2	12·9	9·2	9·9	13·3	17·4	20·0	23·2	20·4
Sholapur	29·6	32·1	31·7	30·2	28·3	21·7	17·1	18·0	17·8	21·2	23·3	28·0	24·9
Poona	30·1	33·3	32·8	31·3	26·6	15·9	11·0	12·2	15·1	21·1	25·5	29·6	23·7
Malegaon	33·1	34·9	33·6	31·8	29·0	19·8	13·1	14·7	17·1	24·3	28·9	32·9	26·1
Akola	31·1	33·7	32·9	31·7	26·5	20·2	14·1	13·9	15·9	24·1	29·0	32·0	25·4
Amraoti	26·9	28·2	29·8	29·8	28·0	20·5	13·3	13·9	16·9	21·9	24·5	26·3	23·3
Khandwa	31·5	33·5	32·5	30·0	25·9	19·2	10·8	11·9	14·5	23·8	29·6	32·8	24·7
Hoshangabad . . .	27·8	30·1	31·8	31·7	27·8	19·0	10·2	11·4	14·8	22·1	26·8	28·1	23·5
Nagpur	27·6	29·8	30·9	29·8	27·6	19·7	12·4	12·7	15·2	21·1	24·3	27·0	23·2
Chanda	30·3	32·8	33·0	30·8	27·7	18·4	12·1	12·7	14·6	20·9	25·3	30·5	24·1
Seoni	27·7	28·8	30·0	29·6	26·6	18·3	11·0	11·6	14·7	21·7	25·5	28·2	22·8
Jubbulpore	28·9	30·2	32·0	31·2	26·5	18·5	11·0	10·9	14·2	22·9	28·5	30·8	23·8
Saugor	25·2	26·4	27·9	29·1	27·1	21·4	11·5	11·0	15·0	21·6	24·7	24·9	22·2
Raipur	25·8	26·8	28·0	27·5	25·4	18·6	11·5	11·4	13·0	18·0	21·9	25·0	21·1
Sutna	27·3	28·2	30·6	30·6	26·6	17·8	10·1	10·0	12·9	21·8	27·3	28·5	22·6
Sambalpur	27·0	28·4	29·6	29·2	25·5	16·4	9·9	10·2	11·8	16·5	20·8	25·5	20·9
Hyderabad (Deccan) . .	26·2	28·3	28·2	27·1	25·0	19·3	14·9	15·4	15·9	19·0	20·8	25·0	22·1
Bombay	14·4	14·1	12·1	10·9	9·6	8·0	6·6	7·2	8·0	11·1	13·4	14·6	10·8
Ratnagiri	21·3	19·4	15·4	13·1	11·9	9·5	8·4	8·6	9·7	14·7	20·5	22·5	14·6
Karwar	20·7	19·1	14·7	12·0	10·5	9·2	8·4	8·0	9·1	11·9	17·4	20·8	13·5
Cochin	17·3	16·4	13·9	12·8	12·0	10·1	9·4	9·1	10·1	11·3	12·7	15·2	12·5
Calicut	18·3	16·3	14·6	13·5	12·5	9·6	8·6	9·0	10·3	11·7	14·0	17·1	13·0
Mangalore	18·6	16·4	13·1	12·0	11·4	9·6	8·6	8·6	9·4	11·0	14·4	18·0	12·6
Madura	19·4	22·9	24·4	23·9	23·3	22·0	21·2	21·0	20·7	17·9	15·0	15·6	20·6

TABLE III.—*Average monthly diurnal range of temperature of 133 stations in India, etc.*—concld.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Salem	24·9	28·6	27·8	25·5	23·3	20·8	20·3	19·6	20·1	18·8	18·9	20·9	22·5
Coimbatore	22·6	27·0	26·5	24·5	21·3	18·3	17·4	17·9	19·0	17·4	16·8	18·4	20·8
Mercara	20·5	23·9	23·3	20·4	16·4	8·9	6·5	8·4	10·7	13·3	14·7	16·9	15·3
Bangalore	22·7	26·3	26·0	24·0	22·1	18·0	16·2	16·2	16·9	16·1	16·5	18·9	20·0
Negapatam	11·2	12·7	13·4	13·8	16·2	17·7	17·1	15·9	15·9	12·3	9·8	9·2	13·8
Trichinopoly . . .	20·3	24·2	24·9	23·5	22·9	20·5	19·7	19·7	19·8	16·8	15·0	15·5	20·3
Madras	17·1	19·0	17·5	15·9	16·8	17·8	16·7	16·4	16·1	13·8	12·7	13·8	16·1
Masulipatam . . .	17·6	19·1	19·0	17·6	18·0	17·4	14·2	13·8	13·9	13·3	13·3	16·0	16·1
Cuddapah	23·4	26·2	26·2	24·5	21·9	18·7	16·5	16·2	16·6	15·8	17·3	18·8	20·2
Kurnool	29·5	30·7	28·7	26·3	23·9	19·4	16·2	15·6	16·1	18·0	22·4	26·0	22·7
Bellary	27·0	29·8	28·4	26·9	25·2	19·2	16·6	17·4	17·8	18·6	20·6	24·6	22·7
Rajahmundry . . .	22·4	23·3	22·1	21·7	21·3	17·2	11·6	12·2	13·3	14·6	17·5	20·5	19·1
Cocanada	14·0	14·5	15·1	15·8	14·7	13·3	10·1	9·8	10·3	10·3	11·8	13·1	12·7
Vizagapatam* . . .	8·7	8·3	6·6	5·6	5·3	5·1	5·1	4·9	4·8	5·3	5·7	7·3	6·1
Quetta	22·2	20·7	24·8	27·2	30·9	31·4	27·3	28·7	34·8	35·6	32·9	28·3	28·7
Murree	12·5	13·6	14·9	16·4	17·1	17·6	14·5	13·1	15·0	16·1	15·9	13·7	15·0
Simla	5·4	11·0	12·4	14·3	14·2	14·7	8·7	7·7	10·6	11·7	11·7	6·6	10·8
Chakrata	14·6	15·2	17·9	18·6	17·9	14·9	9·8	9·8	11·9	16·0	16·0	16·3	14·9
Mussooree	...	...	...	...	18·4	15·5	9·5	9·1	10·5	12·6	13·4	12·0	...
Ranikhet	14·5	14·6	16·2	17·4	17·5	14·9	10·9	10·4	12·3	15·1	15·7	15·6	14·6
Darjeeling	10·4	12·1	13·7	13·9	12·0	9·9	9·4	9·3	9·7	11·8	12·9	12·1	11·4
Mount Abu	15·9	15·7	16·7	17·3	17·7	15·3	9·0	7·5	10·6	14·7	16·2	16·4	14·4
Pachmarhi	23·5	24·4	24·1	23·0	20·0	13·9	7·6	7·9	10·8	17·4	21·0	24·2	18·1
Wellington	21·0	23·7	20·9	19·7	17·3	13·6	12·7	13·6	15·3	13·5	14·3	16·5	16·9
Aden	9·4	9·4	10·5	13·0	13·0	11·0	11·3	11·4	11·5	14·1	12·9	10·0	11·5

* The thermometers at the Jugga Row Observatory, Vizagapatam (a private observatory) are exposed against an inner wall of the large drawing-room of the residence of the proprietor, and hence the diurnal range is much less than it would be if the instruments were exposed in a shed as at other observatories in India.

In Tables I and II of each of the monthly reviews for 1894 are given the variations of the mean temperature conditions of each station, and of the eleven meteorological provinces from the normal temperature conditions of the month. The following table gives summaries of the temperature variation data for each month of the year 1894 and for the year. In the first table (Table IV) the same division has been adopted as that employed in the Annual Reports from 1887 to 1890, thus enabling an exact comparison to be made of the temperature data of the year 1894 with those of previous years given in the Annual Reports. In the second set of tables [Tables V(*a*), V(*b*), and V(*c*)] the variation data are given for the eleven divisions or meteorological provinces into which the Empire is divided for the purpose chiefly of comparing meteorological and health statistics, and in the last table (Table VI) the data are given for the 52 smaller divisions or areas into which India is sub-divided with a view to the comparison of meteorological and crop statistics.

TABLE IV.—*Geographical Summary of the temperature data of Table II in the 1894 monthly reviews.*

METEOROLOGICAL PROVINCE	Number of Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		°	°	°	°		°	°	°	°	°	°	°	°
North-West Himalaya	6–7	−2·5	+0·8	−2·3	+0·2	+2·0	−0·2	−0·7	−0·3	+0·7	+1·3	−1·5	−4·9	−0·6
Sikkim Himalaya and Nepal.	2	−0·9	+2·6	−1·6	+0·4	+2·4	−0·1	−0·8	−1·3	−0·7	+0·5	−1·3	−0·7	−0·1
Punjab Plains . .	4	−0·5	+1·8	−1·4	+1·3	+3·9	+0·5	−1·9	+0·1	+0·6	+1·6	+1·3	+0·3	+0·6
Gangetic Plain .	9	+0·9	+1·7	−1·6	−0·4	+3·2	−1·6	−0·7	−1·6	−0·8	+0·1	+0·4	+0·5	0
Western Rajputana .	2–3	−1·5	+1·4	−0·6	+1·7	+0·7	−0·4	−2·3	−0·3	+0·7	+0·1	+0·6	−1·2	−0·1
Eastern Rajputana and Central India.	3–4	+1·3	+3·0	−1·3	−0·1	+1·8	−2·4	−1·9	−0·7	−0·2	+0·8	−0·2	+1·4	+0·1
Nerbudda Valley .	2–3	+2·0	+4·4	−1·0	+0·2	+0·6	−2·7	−1·4	−0·5	−0·5	+0·5	−1·7	+3·7	+0·2
Chota Nagpur . .	1	+1·0	+2·1	+0·3	+0·5	+4·4	−0·7	−1·1	−0·5	+0·3	+0·6	−1·2	+0·5	+0·5
Lower Bengal . .	5	+0·7	+2·2	+0·4	−0·6	+2·4	−1·0	−1·3	−1·0	−0·2	+0·4	−1·1	+0·7	+0·1
Assam and Cachar .	3	+0·2	+3·1	−0·1	+0·7	+0·2	+0·5	+0·2	−0·8	−1·1	+0·1	−0·4	+0·4	+0·3
Orissa . . .	2	+0·7	+1·9	+1·3	−0·2	+2·6	−1·4	−1·1	−0·4	+0·6	+0·6	−0·4	+0·9	+0·4
Central Provinces South and Berar.	5	+1·5	+3·2	−0·4	−0·2	+1·1	−1·4	−0·4	0	−0·4	+0·5	−1·7	+2·3	+0·2
Konkan . . .	3	+0·6	+1·9	+0·4	+0·5	+0·4	+0·5	0	+0·6	−0·5	−0·2	−0·4	−0·4	+0·3
Malabar Coast .	1	+0·7	+0·3	+0·7	−0·9	+0·6	+0·3	+0·2	−0·6	+0·5	0	+0·2	+0·9	+0·2
Deccan Hyderabad and Mysore.	4–5	+0·8	+0·6	+0·1	−1·1	−0·5	+0·6	0	+0·1	−0·6	−0·4	−0·7	+1·5	0
East Coast and Carnatic.	4	+0·1	+0·2	+1·0	−0·3	+1·5	+1·1	+1·2	+0·3	+0·1	+0·5	−0·4	+0·6	+0·5
Arakan and Pegu .	5	+0·5	+2·3	+0·5	+0·2	−1·2	−0·1	0	+0·1	+0·8	+0·2	−0·2	+0·7	+0·3
Bay Islands . .	1	−0·2	+2·2	+1·2	−0·1	−1·2	−0·2	+0·3	0	−0·8	+0·2	+0·4	+0·7	+0·2
Extra Tropical India	39–41	−0·1	+2·0	−1·2	+0·2	+2·0	−0·9	−1·1	−0·8	−0·1	+0·6	−0·4	−0·3	0
Tropical India .	25–26	+0·7	+1·7	+0·4	−0·2	+0·3	−0·1	+0·1	+0·1	−0·1	+0·2	−0·6	+1·0	+0·3
Whole India . .	65–67	+0·2	+1·9	−0·5	0	+1·5	−0·6	−0·7	−0·5	−0·1	+0·4	−0·5	+0·2	+0·1

TABLE V (*a*).—*Variation of the mean monthly maximum temperature from the normal in 1894 in the eleven meteorological provinces of India.*

METEOROLOGICAL PROVINCE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Burma Coast and Bay Islands .	−0·1	+1·2	+0·5	+0·3	−3·1	−0·5	−0·7	−0·1	+0·5	−0·4	−0·4	+0·4	−0·2
Burma Inland . . .	0	+0·9	−1·6	−2·1	−3·2	−1·3	−1·9	−1·6	−0·2	−1·0	−0·6	−0·2	−1·3
Assam	+0·7	+3·4	−0·8	+1·0	−1·0	+0·8	+0·3	−1·3	−2·5	−1·5	−1·7	−1·0	−0·2
Bengal and Orissa . . .	+0·7	+2·3	+0·5	−0·8	+2·7	−0·6	−0·6	−1·0	−0·4	−0·7	−1·8	−0·3	0
Gangetic Plain and Chota Nagpur.	+0·7	+0·3	−1·5	−1·3	+4·1	−1·7	−0·4	−2·0	−0·8	−2·5	−2·1	−0·4	−0·6
Upper Sub-Himalayas . .	−4·2	−1·7	−4·5	−0·8	+3·7	−2·9	−3·7	−2·1	−1·7	+0·1	−2·0	−4·5	−2·1
Indus Valley and North-West Rajputana.	−4·8	−0·9	−1·7	+1·5	+2·2	+0·8	−3·4	+0·2	+0·2	+0·5	+0·4	−3·2	−0·7
East Rajputana, Central India and Gujarat.	−1·1	+1·2	−1·4	+0·5	+0·7	−3·5	−3·0	−0·6	−0·4	−1·6	−0·7	−2·6	−1·0
Deccan	+0·7	+1·6	−1·2	−1·2	+1·2	−1·8	−0·7	−0·4	−0·7	−1·5	−1·9	+1·5	−0·4
West Coast	+0·9	+1·8	+0·3	−0·1	+0·7	+0·7	+0·5	+0·4	−0·3	−0·8	+0·2	+0·4	+0·4
South India	0	−0·7	+0·3	−1·3	+1·2	+0·9	+1·5	+0·5	−0·9	−0·8	−0·9	+1·3	+0·2

TABLE V (*b*).—*Variation of the mean monthly minimum temperature from the normal in 1894 in the eleven meteorological provinces of India.*

METEOROLOGICAL PROVINCE.	January.	February.	March.	April.	May.	June.	July.	August	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Burma Coast and Bay Islands .	+0·2	+3·2	+1·8	+0·8	−0·7	+0·2	0	+0·3	+0·6	−0·1	−1·5	−0·6	+0·4
Burma Inland . . .	−1·1	+2·6	+1·3	+0·9	−1·2	−0·2	−0·5	−0·2	+0·9	+1·1	−0·8	+0·5	+0·3
Assam	−1·2	+3·3	−0·2	+0·6	+0·4	+0·3	−0·2	−0·6	−0·7	+1·3	+0·7	+0·9	+0·4
Bengal and Orissa . . .	0	+3·2	+0·2	−0·1	+1·6	−0·2	−0·6	−0·4	+0·3	+1·7	+0·3	+1·9	+0·7
Gangetic Plain and Chota Nagpur.	+2·0	+4·2	−1·2	−0·8	+3·1	−0·5	−0·6	−0·9	+0·2	+3·0	+2·5	+3·1	+1·2
Upper Sub-Himalayas . .	+1·7	+3·8	−1·5	−0·6	+2·1	−0·1	−0·9	−0·3	+0·2	+0·9	+3·0	+3·2	+0·9
Indus Valley and North-West Rajputana.	+0·2	+2·0	−1·4	+0·2	+1·2	+0·7	−0·9	+0·3	0	−1·6	+1·2	+1·5	+0·3
East Rajputana, Central India and Gujarat.	+2·0	+3·8	−1·0	−0·3	+0·7	−0·7	−1·2	−0·2	+0·7	+1·3	−0·6	+2·9	+0·7
Deccan	+1·6	+3·6	+0·5	−0·1	+0·9	−0·1	−0·4	0	+0·6	+2·4	−0·4	+3·9	+1·4
West Coast	+0·1	+1·2	+0·9	−0·2	+0·6	+0·5	+0·2	+0·5	+0·1	+0·3	−0·2	+0·4	+0·0
South India	0	+0·2	+0·7	−0·2	+0·2	+0·2	+0·6	+0·3	+0·1	+0·5	−0·2	0	+0·2

TABLE V (*c*).—*Variation of the mean monthly temperature from the normal in 1894 in the eleven meteorological provinces of India.*

METEOROLOGICAL PROVINCE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Burma Coast and Bay Islands .	+0·1	+2·2	+1·2	+0·6	−1·9	−0·2	−0·4	+0·1	+0·5	−0·3	−1·0	−0·2	+0·1
Burma Inland . . .	−0·6	+1·8	−0·2	−0·7	−2·2	−0·8	−1·2	−1·0	+0·4	+0·1	−0·7	+0·2	−0·5
Assam	−0·3	+3·4	−0·5	+0·8	−0·5	+0·6	+0·1	−1·0	−1·6	−0·1	−0·5	−0·1	+0·1
Bengal and Orissa . . .	+0·4	+2·7	+0·3	−0·5	+2·2	−0·4	−0·6	−0·7	0	+0·5	−0·8	+0·8	+0·3
Gangetic Plain and Chota Nagpur.	+1·4	+2·3	−1·4	−1·1	+3·7	−1·1	−0·5	−1·5	−0·3	+0·2	+0·2	+1·4	+0·3
Upper Sub-Himalayas . .	−1·2	+1·1	−3·0	−0·7	+3·0	−1·5	−2·3	−1·2	−0·8	+0·5	+0·5	−0·6	−0·6
Indus Valley and North-West Rajputana.	−2·3	+0·6	−1·6	+0·9	+1·7	+0·8	−2·2	+0·3	+0·1	−0·5	+0·8	−0·8	−0·2
East Rajputana, Central India and Gujarat.	+0·5	+2·5	−1·3	+0·1	+0·6	−2·1	−2·1	−0·4	+0·1	−0·2	−0·7	+0·1	−0·2
Deccan	+1·2	+2·7	−0·4	−0·7	+1·0	−1·0	−0·6	−0·2	−0·1	+0·4	−1·2	+2·7	+0·3
West Coast	+0·5	+1·5	+0·6	−0·1	+0·7	+0·6	+0·4	+0·4	−0·1	−0·2	0·	+0·4	+0·4
South India	0	−0·2	+0·4	−0·8	+0·7	+0·6	+1·1	+0·4	−0·4	+0·6	−0·5	+0·6	+0·2

TABLE VI.—*Variation of the mean monthly and annual temperature from the normal in 1894 in the 52 meteorological districts or divisions of India.*

Province.	Division.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean variation of year.
		°	°	°	°	°	°	°	°	°	°	°	°	°
Burma	Tenasserim	−0·7	+2·2	+1·5	+1·3	−2·4	−0·1	−0·6	+0·1	+0·9	−0·2	−0·9	−0·2	+0·1
	Lower Burma	+0·7	+2·5	+0·9	+0·3	−1·9	+0·1	0	+0·4	+0·5	−0·1	−0·7	+0·1	+0·2
	Central do.	−0·6	+1·8	+0·5	−1·1	−2·3	−0·1	−0·6	−0·2	+0·7	−0·3	−1·0	−0·1	−0·3
	Upper do.	?	?	−0·8	−0·2	−1·2	−1·4	−1·8	−1·7	0	+0·5	−0·4	+0·5	−0·7
	Arakan	−0·5	+1·7	+1·2	+0·2	−0·9	−1·0	−0·9	−0·9	−0·1	−1·0	−2·2	−1·4	−0·5
Bengal and Assam.	Eastern Bengal	0	+3·0	−0·1	−0·1	+0·9	−0·2	−0·4	−0·8	+0·2	+0·2	−1·3	+0·4	+0·2
	Assam (Surma)	+0·4	+3·5	−0·3	+0·2	+0·3	+1·1	+0·6	−0·5	−0·4	−0·8	−0·8	+0·8	+0·3
	Do. (Brahmaputra)	−0·6	+3·5	−0·6	+1·0	−0·9	+0·4	−0·3	−1·3	−2·2	+0·3	−0·4	−0·5	−0·1
	Deltaic Bengal	+0·3	+1·8	+0·9	−0·5	+2·4	−1·1	−1·4	−1·0	+0·1	+0·3	−1·3	+0·6	+0·1
	Central do.	+1·1	+2·8	−0·5	−1·1	+2·9	−0·4	−0·4	−0·8	−0·1	+0·7	−0·8	+0·9	+0·4
	North do.	?	+4·7	−0·5	+0·4	+1·9	+1·2	+1·0	−0·7	−1·2	+1·0	+0·1	+1·0	+0·8
	Orissa	+0·6	+2·0	+1·5	−0·7	+2·7	−1·0	−1·4	−0·3	+0·5	+0·6	−0·3	+1·2	+0·5
	Chota Nagpur	+1·2	+3·4	+0·7	0	+4·7	−1·0	−0·9	−0·6	+0·7	+1·1	−0·3	+1·4	+0·9
	Bihar (South)	+1·8	+2·2	−1·9	−1·3	+4·4	−0·4	−0·4	−1·6	−0·7	+0·3	+0·4	+1·9	+0·4
	Do. (North)	+1·0	+3·3	−1·1	−0·6	+2·6	−0·3	+0·8	−0·9	−0·9	+0·8	+0·3	+1·3	+0·5
North-Western Provinces and Oudh.	North-Western Provinces (East).	+1·5	+1·4	−2·1	−1·3	+3·1	−2·1	−1·0	−2·1	−0·4	−0·6	+0·2	+1·3	−0·2
	Oudh (South)	+1·0	+0·9	−2·5	−2·0	+3·5	−1·5	−0·6	−2·5	−0·2	−0·3	+0·4	+0·6	−0·3
	Do. (North)	?	?	?	?	?	?	?	?	?	?	?	?	?
	North-Western Provinces (Central).	?	?	?	?	?	?	?	?	?	?	?	?	?
	North-Western Provinces (West).	+0·2	+1·2	−1·4	+0·3	+2·9	−2·2	−1·3	−0·7	−0·4	−1·2	−0·3	−0·1	−0·3
	North-Western Provinces (Submontane).	−0·4	+1·6	−2·8	−0·8	+2·7	−1·4	−1·1	−1·5	−0·8	+0·8	+0·5	−0·2	−0·3
Punjab	Punjab (South)	−2·3	−0·2	−2·5	+0·4	+3·5	−0·2	−1·4	+0·7	−1·1	+0·6	+0·7	−1·2	−0·3
	Do. (Central)	−1·3	+1·5	−2·5	0	+3·8	−0·9	−2·8	+0·5	0	+1·3	+1·8	−0·1	+0·1
	Do. (Submontane)	−0·9	+0·5	−3·8	−0·3	+3·2	−2·1	−4·2	−1·0	−2·0	−0·4	+0·1	−0·7	−1·0
	Do. (Hill Districts)	−4·7	+0·5	−3·4	−0·5	+2·5	−0·8	−2·5	−0·6	−0·2	+2·0	−1·1	−4·4	−1·1
	Do. (North-West)	−2·6	+1·7	−2·7	−0·8	+1·7	−0·8	−3·3	−0·4	0	+0·2	+0·8	−0·7	−0·6
	Do. (West)	−2·2	+1·3	−2·9	+0·4	+3·6	+1·1	−1·2	+0·2	0	−0·2	+0·6	+0·1	+0·1
Bombay and Malabar Coast Districts (Madras).	Malabar	+0·5	+0·7	+0·6	−0·8	+0·6	+0·5	+0·5	−0·2	+0·1	−0·1	+0·2	+0·9	+0·3
	Madras (South Central)	−0·1	−1·1	−0·2	−1·4	+0·1	+1·3	+0·9	+0·5	+0·2	+1·0	−0·4	+0·9	+0·1
	Coorg	+0·5	+0·4	0	−1·6	−1·2	+0·3	+0·8	−0·1	−0·6	−0·6	−1·0	+1·1	−0·2
	Mysore	+1·6	+0·9	+2·2	−1·0	−1·4	−0·2	+0·5	+0·1	+0·2	+1·1	−0·6	+1·2	+0·4
	Konkan	+0·5	+2·1	+0·6	+0·6	+0·7	+0·8	+0·2	+1·1	−0·3	−0·4	−0·2	−0·1	+0·5
	Bombay Deccan	+0·6	+0·5	+0·3	−1·3	−0·3	+0·8	−0·2	+0·5	−0·8	−0·1	−1·0	−0·1	−0·1
	Hyderabad (North)	?	?	?	?	?	?	?	?	?	?	?	?	?
	Khandesh	+1·7	+3·3	−0·5	+0·6	0	−0·1	−0·8	+1·1	−0·1	+1·5	−2·4	+3·4	+0·6
Central Provinces and Berar.	Berar	+1·9	+3·7	+0·2	−0·6	+0·4	−1·6	−0·6	+0·6	−0·5	+0·9	−1·6	+3·7	+0·5
	Central Provinces (West)	+1·5	+3·8	−0·5	−0·6	+0·7	−2·4	−1·0	−0·8	−0·4	+0·3	−1·7	+3·4	+0·2
	Do. (Central)	+0·9	+3·3	−1·0	−0·9	+1·0	−1·9	−0·9	−0·8	+0·3	+0·7	−1·3	+2·9	+0·2
	Do. (East)	+1·4	+3·0	+0·5	−0·5	+3·1	−0·3	−1·1	−0·9	+0·8	+0·5	−0·2	+2·1	+0·7
Bombay North	Gujarat	+1·1	+3·0	+0·5	+0·9	−0·3	−0·8	−1·6	+0·6	−0·2	+0·1	−2·8	+0·3	+0·1
	Kathiawar	+0·5	+1·5	−1·5	+0·7	−1·3	−2·4	−4·0	−0·4	−0·2	−1·0	−0·6	−0·7	−0·8
	Sind and Cutch	−2·1	+0·2	−0·4	+1·5	+0·3	+0·6	−2·5	−0·4	0	−1·3	+0·9	−1·8	−0·4
Rajputana and Central India.	Central India (East)	+1·3	+2·2	−2·4	−1·2	+2·5	−2·6	−1·6	−0·7	+1·2	−0·3	+0·9	+2·5	+0·2
	Rajputana (East)	+0·5	+3·2	−1·2	+0·2	+0·6	−2·3	−2·3	−0·4	+0·2	+0·5	−0·6	+0·1	−0·1
	Central India (West).													
	Rajputana (West)	−2·9	+0·3	−3·4	+0·3	+1·8	0	−2·3	+0·1	+1·1	−0·9	−0·2	−3·3	−0·8
Madras	East Coast (North)	−0·4	−0·5	+0·7	−1·1	+1·3	−1·5	+1·4	+0·9	−0·3	+0·3	−0·1	+0·6	+0·1
	Hyderabad (South)	+0·1	−0·6	−0·4	−0·7	+1·1	+1·0	+1·9	?	−0·8	+0·2	−1·4	+1·5	+0·2
	Madras (Central)	−0·3	−1·0	+0·1	−0·6	−0·3	+1·1	+0·4	−0·4	−0·7	+0·7	−1·3	+0·5	−0·2
	East Coast (Central)	−0·2	−0·2	0	−0·9	+2·0	+0·5	+1·5	+1·2	−1·5	−0·1	−1·0	+0·4	+0·1
	East Coast (South)	−0·3	+0·4	+0·7	−0·1	+2·2	+1·8	+1·9	+0·4	−0·5	+1·4	0	+0·7	+0·7
	Madras (South)	−0·2	−0·3	+0·5	−0·5	+1·6	+1·2	+0·4	+1·4	−0·8	+0·2	−0·8	−0·4	+0·2

In the following discussion of the meteorology of India during the year 1894, the year is divided into four seasons according to the following arrangement:—

1st—The cold weather period, including the months of January and February.

2nd—The hot weather period, including the months of March, April and May.

3rd—The period of the south-west monsoon rains proper, including the months of June, July, August and September.

4th—The period of the retreating south-west monsoon, including the months of October, November and December.

The following gives a *resumé* of the chief features of the temperature conditions during the year:—

I.—The Cold Weather Period.—The weather was disturbed during this period by a succession of storms. Four cold weather storms advanced across Northern India in January. Two of these were very feeble disturbances, and only one of the four gave rise to a well-marked secondary depression in the Punjab. Three cold weather storms affected the weather in North-Western India during the month of February. They were feeble diffused disturbances, and only noteworthy on account of the precipitation they gave in North-Western India. The most remarkable feature of the whole of the cold weather storms was that they gave rainfall to much higher elevations than usual, and hence there was not throughout the period any large accumulation of snow on the highlands of Baluchistan and Afghanistan.

The heavy snowfall which accompanied them in the Western Himalayas was restricted to the higher elevations and extended further into the interior than usual. Ladakh and the Karakorram mountain range hence received unusually large snowfall. In consequence of the abnormal character and distribution of the snowfall, the cold waves which followed the storms in their passage across Northern India were much feebler than usual, and the disturbed weather of the period exercised comparatively little influence on the temperature conditions of the period.

The following gives a summary of the chief features of the temperature conditions of the period:—

1st.—The mean day temperature was below the normal to a considerable extent in North-Western India and was normal or in slight excess in North-East and Central India and the Peninsula in January. It was in slight defect in Upper India and in slight to moderate excess over the remainder of India in February. Hence on the mean of the period it was in moderate defect in North-Western India and in slight excess in North-East and Central India and the Peninsula. The following gives comparative data for that area of deficient day temperature:—

Political Division.	Variation of Mean Maximum temperature from normal.		
	January 1894.	February 1894.	Period, January and February 1894.
	°	°	°
Punjab	−5·6	−2·0	−3·8
Sind	−5·0	−1·8	−3·4
Rajputana (West)	−4·5	−0·1	−2·3
North-Western Provinces	−1·1	−1·2	−1·2

Comparative data for the remainder of India are given below:—

Political Division.	Variation of mean maximum temperature from normal.		
	January 1894.	February 1894.	Period, January and February 1894.
	°	°	°
Rajputana	−2·8	+1·0	−0·9
Central India	−0·5	−0·6	−0·6
Bengal	+1·0	+2·1	+1·6
Assam	+0·9	+3·7	+2·3
Central Provinces	+1·1	+2·5	+1·8
Bombay	+0·8	+1·5	+1·2
Madras	−0·3	−1·1	−0·7

2nd.—The mean minimum or night temperature was in general excess during the period, as is shown by the following data for the larger political divisions:—

Political Division.	Variation from normal of mean minimum temperature of		
	January 1894.	February 1894.	Period, January and February 1894.
	°	°	°
Punjab	+1·0	+3·7	+2·4
North-Western Provinces	+2·2	+3·7	+3·0
Rajputana	+0·5	+2·5	+1·5
Central India	+3·0	+4·9	+4·0
Bihar and Chota Nagpur	+1·3	+4·1	+2·7
Bengal and Assam	−0·2	+3·3	+1·6
Central Provinces	+1·4	+4·1	+2·8
Bombay	+0·8	+1·8	+1·3
Madras	−0·1	+0·2	+0·1
Burma	−0·5	+2·9	+1·2

The increased night temperature was hence most strongly shown in North-Western India, more especially in the North-Western Provinces, Central India, Bihar, Chota Nagpur and the Central Provinces.

3rd.—The mean temperature of the period was in slight defect in the area of diminished day temperature and in slight to moderate excess in the remainder of India. The following shows that the variations of the mean temperature conditions of the period were nowhere large or important :—

Political Division.	Variation from normal of mean daily temperature of		
	January 1894.	February 1894.	Period January and February 1894.
	°	°	°
Punjab	−2·3	+0·9	−0·7
North-Western Provinces	+0·6	+1·3	+1·0
Rajputana	−1·2	+1·8	+0·3
Central India	+1·3	+2·2	+1·8
Bihar and Chota Nagpur	+1·3	+3·0	+2·2
Bengal	+0·5	+2·9	+1·7
Assam	−0·1	+3·5	+1·7
Central Provinces	+1·3	+3·4	+2·4
Bombay	+0·8	+1·7	+1·3
Madras	−0·2	−0·5	−0·4
Burma	−0·3	+2·1	+0·9

Temperature was most considerably in excess in the Central Provinces, Chota Nagpur and Bihar, in which areas it was on the mean of the whole period slightly above 2° in excess. Also, as is very frequently the case, in the cold weather when temperature is above the normal in Northern India, it was in defect in Madras.

4th.—The temperature conditions at the hill stations in Upper India were similar to those in the adjacent plains. Temperature was in moderate defect in January, and in slight excess in February, and was hence in slight defect on the mean of the period. It is noteworthy that notwithstanding the heavy snowfall in Ladakh, the mean temperature of the period was reduced below the normal to a considerably less extent at Leh than at the hill stations in Upper India:—

Station.	Variation from normal of mean daily temperature of		
	January 1894.	February 1894.	Period, January and February 1894.
	°	°	°
Leh	−0·2	−0·7	−0·5
Kailang	−1·1	+2·3	+0·6
Murree	−6·2	+1·5	−2·4
Simla	−2·5	−0.5	−1·5
Chakrata	−2·9	+1·6	−0·7
Quetta	−4·7	+0·6	−2·1

The preceding data hence establish that the disturbed weather of the period exercised unusually little influence in reducing temperature below the normal of the period in Upper India.

The coldest periods in North-Western India were the 5th to the 7th January, the 23rd to the 25th January, and the 29th January to the 1st of February, but the minimum temperatures recorded during these periods were by no means so low as are occasionally observed in the cold weather. The following gives the lowest minimum temperatures recorded at ten representative stations in Northern India in the cold weathers of 1891-92, 1892-93, and 1893-94, for comparison :—

Station.	Lowest minimum temperature recorded in cold weather of		
	1893-94.	1892-93.	1891-92.
	°	°	°
Gnatong	10·1	−5·5	3·1
Leh	−6·5	−4·8	4·8
Murree	24·5	19·2	27·7
Quetta	14·8	11·8	21·8
Peshawar	33·4	31·9	31·9
Lahore	38·2	33·2	33·2
Jeypore	42·2	36·7	44·2
Jacobabad	34·5	34·5	37·6
Lucknow	42·2	40·0	38·9
Allahabad	43·9	40·4	41·9

II.—The Hot Weather Period.—Weather was more disturbed and showery than usual in March, more especially in North-Western India. Temperature was hence reduced below the normal, thus delaying the establishment of hot weather conditions in Northern and Central India. During the months of April and May, temperature varied more rapidly and largely than usual, partly

in consequence of the more frequent occurrence of series of hot weather storms, and partly of the unusually heavy rainfall in Burma Assam and East Bengal in May. The most remarkable feature of the period was the sharp contrast in May between the temperature conditions of the area of heavy rainfall in East Bengal, and the area of hot dry winds in West Bengal.

The chief features of the temperature conditions of the period are given below :—

1st.—The maximum or day temperature was below the normal to a large extent in Upper India in March, and considerably below it in May in Burma, Assam and East Bengal. It was in moderate to large excess in May in the Gangetic Plain and Upper and Central India, and in slight to moderate excess in the Peninsula. The following gives comparative data for the larger political divisions :—

Political Division.	Variation of mean maximum temperature from normal.			
	March 1894.	April 1894.	May 1894.	Period, March to May.
	°	°	°	°
Punjab	—4·6	—0·5	+3·4	—0·6
North-Western Provinces	—2·6	—0·5	+3·8	+0·2
Rajputana	—1·6	+1·1	+1·5	+0·3
Central India	—3·2	—1·0	+2·0	—0·7
Bihar and Chota Nagpur	—0·6	—1·1	+4·4	+0·9
Bengal and Orissa	+0·4	—0·7	+2·5	+0·7
Assam	—1·1	+1·0	—1·0?	—0·4
Central Provinces	—1·2	—1·1	+1·8	—0·2
Bombay	—0·1	—0·5	+0·3	—0·1
Madras	—0·2	—1·5	+1·6	0
Burma	—0·3	—0·6	—2·9	—1·3

The data indicate that on the average of the whole period the mean day temperature differed little from the normal.

2nd.—The variations of the minimum temperature from the normal were similar to those of the maximum temperature, but were smaller in amount, and hence on the average of the whole period the night temperature was practically normal as is shown by the following :—

Political Division.	Variation of mean minimum Temperature from normal.			
	March 1894.	April 1894.	May 1894.	Period, March to May, 1894.
	°	°		°
Punjab	—1·3	+0·3	+2·7	+0·6
North-Western Provinces and Oudh	—1·7	—1·4	+2·2	—0·3
Rajputana	—3·0	—0·7	+1·0	—0·9
Central India	—1·5	—1·3	+2·9	0
Bihar and Chota Nagpur	—0·9	—0·2	+3·4	+0·8
Bengal and Orissa	+0·2	—0·1	+1·7	+0·6
Assam	+0·2	+0·3	+0·4	+0·3
Central Provinces	+0·6	—0·2	+1·4	+0·6
Bombay	+0·6	0	+0·2	+0·3
Madras	+0·6	0	+0·7	+0·4
Burma	+1·6	+0·8	—0·5	+0·6

3rd.—The mean temperature was below the normal to a moderate extent in Upper India in the month of March, and in Burma and Assam in the month of May. The mean temperature of the whole period differed little from the normal, but was generally in very slight excess as is shown by the following data for the larger political divisions :—

Political Division.	Variation of mean daily temperature from normal.			
	March 1894.	April 1894.	May 1894.	Period, March to May.
	°	°	°	°
Punjab	—3·0	—0·1	+3·1	0
North-Western Provinces and Oudh.	—2·2	—0·9	+3·0	0
Rajputana	—2·3	+0·2	+1·3	—0·3
Central India	—2·4	—1·2	+2·5	—0·4
Bihar and Chota Nagpur	—0·8	—0·6	+3·9	+0·8
Bengal and Orissa	+0·2	—0·4	+2·1	+0·6
Assam	—0·5	+0·6	—0·3	—0·1
Central Provinces	—0·3	—0·7	+1·6	+0·2
Bombay	+0·3	—0·2	+0·3	+0·1
Madras	+0·2	—0·8	+1·2	+0·2
Burma	+0·7	+0·1	—1·7	—0·3

The hottest period of the hot weather in 1894 extended from the 16th to the 29th or 30th May, and the highest maximum temperatures over the greater part of the interior of India were registered between the 27th and 31st. The most noteworthy feature of the hottest period was its intensity in West Bengal, Bihar and Chota Nagpur, where higher temperatures were registered than have been previously recorded, as is shown by the following data :—

Station.	Highest maximum, 1894.	Date.	Highest previously recorded.	Year.
	°		°	
Patna	114·1	27th May	113·8	1874
Chaibassa	117·8	29th ,,	116·0	1884
Bankura	117·1	28th ,,	116·1	1889
Midnapore	117·4	29th ,,	115·4	1889
Balasore	111·0	27th ,,	113·0	1888
Sambalpur . . .	116·5	30th ,,	117·3	1892

This period from the 25th to the 31st was also the hottest period of the year in Sind, Rajputana and North-Western India generally, but the highest temperatures were not so excessive as are occasionally registered. Maximum temperatures between 114° and 120° were registered at the great majority of stations in the interior of Northern and Central India and the North Deccan during this period. Jacobabad recorded the absolute maximum of the year, *viz.*, 121° on the 5th of June (*i. e.*, for the 24 hours period preceding 8 A. M. of that date).

The most abnormal feature of this period was the contrast between the very low temperature prevailing in East Bengal, Assam and Burma, due to heavy rain, and the excessive temperature in West Bengal, Bihar, Chota Nagpur and the eastern districts of the Central Provinces. Full data are given in page 198 of the May review. The following gives the variations of the mean temperature from the normal during this period in Assam, and in Bihar and Chota Nagpur in illustration of the contrast —

Political Division.	Variation from normal of mean temperature of 24 hours preceding 8 A. M. of date.								
	20th	21st	22nd	23rd	24th	25th	26th	27th	28th
	°	°	°	°	°	°	°	°	°
Assam . .	−0·7	−0·9	−2·5	−4·5	−5·5	−3·0	−5·4	−6·9	−6·5
Bihar . .	+5·9	+6·5	+6·8	+5·7	+4·0	+4·8	+8·4	+8·9	+6·8
Chota Nagpur .	+6·9	+4·0	+6·1	+7·1	+7·3	+9·4	+11·0	+10·3	+12·2

III.—The South-West Monsoon Period.—The south-west monsoon current was slightly later than usual in being established in the west coast districts, but advanced with unusual rapidity into the interior and gave an excessively heavy downpour in the Punjab at the end of the second week of June. Both currents prevailed with unusual steadiness in June, July and August, and gave heavy rainfall over nearly the whole of Northern and Central India. The rainfall was more or less below the normal during the months of June and July in two areas, *viz.*, the Deccan and Assam, North Bengal and East Bengal. These areas, however, obtained frequent and moderate to heavy rain in the latter half of August and September. The south-west monsoon rainfall in India was hence on the whole more abundant than usual, and was excessive in the greater part of the North-Western Provinces. The temperature conditions were determined by the distribution of the rainfall.

1st.—The maximum or day temperature was below the normal on the average of the whole period, as is shown by the following data for the larger political divisions :—

Political Division.	Variation from normal of mean maximum temperature in				
	June 1894.	July 1894.	August 1894.	September 1894.	Period June to September 1894.
	°	°	°	°	°
Burma	−0·9	−1·2	−0·8	+0·2	−0·7
Assam	+1·1	+0·6	−1·2	−2·1	−0·4
Bengal and Orissa . .	−0·5	−0·5	−1·0	−0·5	−0·6
Bihar and Chota-Nagpur	−1·2	0	−1·4	−0·8	−0·9
North-Western Provinces and Oudh . . .	−2·4	−1·0	−2·5	−1·1	−1·8
Punjab	−1·8	−4·6	−0·6	−1·4	−2·1
Rajputana . . .	−1·8	−3·1	+0·5	+1·0	−0·9
Central India . . .	−3·4	−1·7	−1·5	+0·4	−1·6
Central Provinces . .	−2·6	−1·3	−1·1	−0·2	−1·3
Bombay	+0·5	+0·1	+0·7	−0·8	+0·1
Madras	+1·0	+1·6	+0·9	−1·4	+0·5

The deficiency was greatest in the area of excessive rainfall in the North-Western Provinces, Punjab and Central India.

2nd.—The minimum or night temperature differed very slightly from the normal. It was in slight defect in the areas of largest excess of rainfall relatively to the normal (*i. e.*, the North-Western Provinces and Rajputana) and was practically normal in the remaining

divisions as is shown by the following data:—

Political Division.	Variation from normal of mean minimum temperature in				
	June 1894.	July 1894.	August 1894.	September 1894.	Period June to September 1894.
	°	°	°	°	°
Burma	−0·1	−0·3	−0·1	+0·6	0
Assam	+0·3	−0·3	−0·6	−0·6	−0·3
Bengal and Orissa	−0·1	−0·5	−0·4	+0·2	−0·2
Bihar and Chota Nagpur	+0·1	−0·3	−0·6	+0·2	−0·2
North-Western Provinces and Oudh	−1·1	−0·9	−0·9	+0·3	−0·7
Punjab	+0·6	−0·5	+0·4	+0·3	+0·2
Rajputana	−0·5	−1·5	−0·7	+0·3	−0·6
Central India	−1·7	−1·4	+0·1	+1·9	−0·3
Central Provinces	−0·4	−0·7	−0·5	+0·7	−0·2
Bombay	+0·5	−0·2	+0·5	+0·3	+0·3
Madras	+0·5	+0·8	+0·4	+0·2	+0·5

3rd.—The mean temperature of the period was in slight to moderate defect in the Punjab, the North-Western Provinces, Rajputana, Central India and the Central Provinces, and was practically normal in the remainder of the area. The following give comparative data for the larger political divisions:—

Political Division.	Variation from normal of mean daily temperature in				
	June 1894.	July 1894.	August 1894.	September 1894.	Period June to September 1894.
	°	°	°	°	°
Burma	−0·5	−0·8	−0·5	+0·4	−0·4
Assam	+0·7	+0·2	−0·9	−1·4	−0·4
Bengal and Orissa	−0·3	−0·5	−0·7	−0·2	−0·4
Bihar and Chota Nagpur	−0·6	−0·2	−1·0	−0·3	−0·5
North-Western Provinces and Oudh	−1·8	−1·0	−1·7	−0·4	−1·2
Punjab	−0·6	−2·6	−0·1	−0·6	−1·0
Rajputana	−1·2	−2·3	−0·1	+0·7	−0·7
Central India	−2·6	−1·6	−0·7	+1·2	−0·9
Central Provinces	−1·5	−1·0	−0·8	+0·3	−0·8
Bombay	+0·5	−0·1	+0·6	−0·3	+0·2
Madras	+0·8	+1·2	+0·7	−0·6	+0·5

IV.—The Retreating South-West Monsoon Period.—The rainfall of the months of October and November was more abundant than usual, and was determined to an unusual extent to the Gangetic Plain, which received abnormally late and excessive rain. The rainfall during this period was more irregularly distributed than usual in the peninsula, more especially in Madras, but was nowhere in large defect. Temperature was hence generally in slight to moderate defect in these months over the greater part of Northern and Central India and was in very slight excess in the south of the peninsula. The rains came to an abrupt conclusion at the end of November due to the establishment of high pressure and low temperature conditions in Burma in the second half of November.

The following gives temperature variation data of Burma for this period:—

Variation from normal of.	October 1894.	November 1894.	December 1894.	Period October to December 1894.
	°	°	°	°
Maximum temperature	−0·7	−0·6	−0·1	−0·5
Minimum ,,	+0·3	−1·4	−0·4	−0·5
Mean ,,	−0·2	−1·0	−0·3	−0·5

This cool and also dry period in Burma extended from the middle of November to the third week of December, as is shown by the following temperature variation data of that province for the months of November and December:—

Week ending.	Variation from normal of mean		
	Maximum temperature.	Minimum temperature.	Daily temperature.
	°	°	°
3rd November 1894	+0·2	+1·0	+0·6
10th ,, ,,	−0·1	+1·0	+0·5
17th ,, ,,	−1·0	−1·4	−1·2
24th ,, ,,	−1·0	−3·5	−2·3
1st December ,,	+0·3	−1·3	−0·5
8th ,, ,,	+0·5	−0·8	−0·2
15th ,, ,,	−0·9	−1·4	−1·2
22nd ,, ,,	+1·1	+3·2	+2·2
29th ,, ,,	−0·6	−1·9	−1·3

The conditions prevailing during this period were similar to those which obtained in November 1892 and November 1893; and were, as in those years, an antecedent to the premature withdrawal of the retreating south-

west monsoon from the Bay and the early cessation of the so called "north-east monsoon rains" in Madras.

The following gives comparative data for the three years :—

Month.	Variation of mean temperature from normal in Burma in		
	1892.	1893.	1894.
	°	°	°
October	−0·4	−1·3	−0·2
November	0	−1·0	−1·0
December	−2·4	−3·5	−0·3

The following gives a very brief statement of the chief features of the temperature conditions in India of the period :—

1st.—The maximum or day temperature was generally below the normal in October and November, due to heavier and more widely spread rainfall than usual, and in December over Northern and Central India due to heavier and more frequent rain than usual from a succession of feeble cold weather storms. Hence, as shown below, the day temperature during the period was below the normal, the deficiency being considerable in North-Western India :—

Political Division.	Variation from normal of mean maximum temperature in			
	October 1894.	November 1894.	December 1894.	Period October to December.
	°	°	°	°
Burma	−0·7	−0·6	−0·1	−0·5
Assam	−1·8	−1·8	−0·9	−1·5
Bengal and Orissa	−0·8	−1·8	−0·3	−1·0
Bihar and Chota Nagpur	−1·3	−1·6	+0·3	−0·9
North-Western Provinces and Oudh.	−3·2	−2·6	−2·8	−2·9
Punjab	+1·2	−1·2	−4·5	−1·5
Rajputana	+0·6	+1·0	−3·5	−0·6
Central India	−4·5	−2·4	−0·5	−2·5
Central Provinces	−1·6	−2·0	+1·4	−0·7
Bombay	−0·8	−0·5	+1·1	−0·1
Madras	+0·3	−1·2	+1·0	0

2nd.—The minimum or night temperature was above the normal over nearly the whole of India during this period. The excess was considerable in Central India, North-Western India, Bihar, Chota Nagpur and the Central Provinces. As already stated, it was below the normal in Burma, the deficiency being most marked in November.

The following gives data for the period :—

Political Division.	Variation from normal of mean minimum temperature in			
	October 1894.	November 1894.	December 1894.	Period October to December.
	°	°	°	°
Burma	+0·3	−1·4	−0·4	−0·5
Assam	+1·3	+0·7	+1·3	+1·1
Bengal and Orissa	+1·8	+0·4	+1·9	+1·4
Bihar and Chota Nagpur	+2·7	+1·9	+2·7	+2·4
North-Western Provinces and Oudh.	+2·6	+2·9	+3·6	+3·0
Punjab	0	+2·1	+2·2	+4·1
Rajputana	−1·0	−1·7	+0·3	−0·8
Central India	+3·9	+4·2	+5·4	+4·5
Central Provinces	+2·5	−0·1	+4·2	+2·2
Bombay	+1·3	−1·2	+1·0	+0·4
Madras	+0·7	−0·1	+0·2	+0·3

3rd.—The mean temperature conditions of the period varied to a comparatively small extent from the normal. The only important features were :—

(*1st*) A slight deficiency in Burma, due chiefly to low temperature in November.

(*2nd*) A slight excess in the Central India, Bihar, Chota Nagpur and the Deccan, due chiefly to increased temperature in December. Comparative data are given below :—

Political Division.	Variation from normal of mean daily temperature in			
	October 1894.	November 1894.	December 1894.	Period October to December.
	°	°	°	°
Burma	−0·2	−1·0	−0·3	−0·5
Assam	−0·3	−0·6	+0·2	−0·2
Bengal and Orissa	+0·5	−0·7	+0·8	+0·2

Political Division.	Variation from normal of mean daily temperature in			
	October 1894.	November 1894.	December 1894.	Period, October to December.
	°	°	°	°
Bihar and Chota Nagpur .	+0·7	+0·2	+1·5	+0·8
North-Western Provinces and Oudh.	−0·3	+0·2	+0·4	+0·1
Punjab	+0·6	+0·5	−1·2	0
Rajputana . . .	−0·2	−0·4	−1·6	−0·7
Central India . . .	−0·3	+0·9	+2·5	+1·0
Central Provinces . .	+0·5	−1·1	+2·8	+0·7
Bombay	+0·3	−0·9	+1·1	+0·2
Madras	+0·5	−0·7	+0·6	+0·1

The following table gives the variations of the mean temperature of Extra Tropical and Tropical India and also of the whole of India from the normal, month by month, during the year 1894 :—

Month.	Variation from normal of mean daily temperature in		
	Extra Tropical India.	Tropical India.	Whole India.
January	−0·1	+0·7	+0·2
February	+2·0	+1·7	+1·9
March	−1·2	+0·4	−0·5
April	+0·2	−0·2	0
May	+2·0	+0·3	+1·5
June	−0·9	−0·1	−0·6
July	−1·1	+0·1	−0·7
August	−0·8	+0·1	−0·5
September	−0·1	−0·1	−0·1
October	+0·6	+0·2	+0·4
November	−0·4	−0·6	−0·5
December	−0·3	+1·0	+0·2
Whole year	0	+0·3	+0·1

The variations of the mean temperature conditions from the normal were hence generally small in amount, and in this respect the year 1894 contrasts strikingly with the previous year 1893.

The mean temperature of the whole Indian area was normal or in excess in six months and in defect during the remaining six months of the year. The excess was general and moderately large in two months, *viz.*, February and May. The excess was nearly as large in Tropical as in Extra Tropical India in February and averaged 1°·9 for the whole of India. In May the excess was large in North-Eastern and Central India and small in the Peninsula. It averaged 2° in Extra Tropical India and ½° in Tropical India. Temperature was in slight general defect during the rains from June to September, the deficiency being a maximum in July when, however, it only averaged ·7° for the whole of India. October was slightly warmer and November slightly cooler than usual. In December temperature was in slight excess in the Peninsula and in slight defect in North-Western India.

The mean temperature of the year of Extra Tropical India agreed exactly with the normal and of Tropical India was 0·3° in excess. The annual variations were small over the whole of India and exceeded ½° in only two out of the eighteen divisions of Table IV, *viz.*, the Punjab (·6° in excess) and the North-West Himalaya (·6° in defect).

The following gives a summary of the more important features of the temperature conditions of the year:—

(1) The mean temperature conditions of the year were very approximately normal over the whole of India.

(2) The cold weather period was warmer than usual, the excess being very small in January, and increasing slightly from north to south.

(3) The chief feature of the hot weather period was the excessive temperature in West Bengal, Bihar, Chota Nagpur and the eastern districts of the Central Provinces during the greater part of May, more especially the last fortnight of the month.

(4) Temperature was in slight to moderate general defect during the rains from June to September, the deficiency being greatest in July. The deficiency was chiefly exhibited in Northern and Central India.

(5) During the retreating south-west monsoon period temperature was in general slight excess in October and in slight defect in November. Temperature continued below the normal over North-Western India in December, but was again in excess in North-Eastern India and the Peninsula.

The following table gives the progressive variation of the mean annual temperature of the past 20 years :—

Year.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
Number of stations.	72	72	74	74	70	106	110	113	122	122	118	122	126	127	81	85	72	74	68	66
	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
Mean anomaly.	−0·29	−0·08	+0·17	+0·62	−0·13	+0·13	−0·01	−0·11	−0·48	−0·61	−0·29	+0·08	−0·23	+0·36	+0·86	+0·13	−0·03	+0·66	−1·33	+0·11
Progressive variation.	...	+0·21	+0·25	+0·45	−0·75	+0·26	−0·14	−0·10	−0·37	−0·13	+0·32	+0·37	−0·31	+0·59	+0·50	−0·73	−0·16	+0·69	−1·99	+1·44

Atmospheric Pressure.

Full information is given in the annual reports formerly issued by the Department of the barometers in use at Indian observatories and of the methods of reducing the observations and obtaining the mean daily and monthly pressures (*e.g.*, pages 58 and 59 of the report for 1890).

In Table II of each monthly review, the monthly mean pressure (corrected for temperature) is given in the fifth figure column, and the variation from the normal in the sixth figure column for each station. The variation data are obtained by a comparison of the actual monthly means with the corresponding normal monthly means published in the last two annual reports (*i.e.*, Table XV, in the reports for 1889 and 1890).

The figures in the fifth and sixth columns of Table II of the present annual summary, giving the mean pressure of the air and its variation from the normal for all second class stations, are strictly comparable with the corresponding data of previous years published in the annual reports and summaries. In the seventh column of Table II in each monthly review, the mean pressures reduced to sea-level and corrected to constant gravity (Lat. 45°) are given. These, it should be noted, are not comparable with the sea-level pressure values of previous years in the annual reports, as, previous to 1891, no correction was made to reduce the monthly pressure means to standard gravity. In Table I of each monthly review and also of the annual summary the pressure data are given for a fixed hour (*viz.*, 8 A.M.) of the day. The second figure column gives the mean 8 A.M. pressure for the month corrected for temperature. In the third figure column the variations of the mean 8 A.M. pressure from the normal mean 8 A.M. pressure are exhibited.

The following gives the normal mean monthly 8 A.M. pressure at 131 stations in India employed in determining the monthly variations of pressure from the normal given in Table I of the monthly reviews of the year 1894. These means have been determined from the 10 A.M. observations of the 11 years period 1878-88 (with corrections to reduce them to their 8 A.M. equivalents) and the 8 A.M. observations of the 5 years 1889-93. These means differ slightly from those given in the Annual Summary for 1891, and will be employed during the next five years for the comparison of 8 A.M. actual and normal monthly pressure data :—

TABLE VII.—*Normal mean monthly 8 A.M. pressures of 131 stations in India and Burma.*

STATION.	Elevetion in feet.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	YEAR.
Moulmein . .	94	29·952	29·922	29·888	29·837	29·768	29·727	29·730	29·756	29·782	29 846	29·891	29·942	29·837
Toungoo . .	181	29·851	29·812	29·763	29·709	29·645	29·594	29·594	29·618	29·659	29·744	29·797	29·855	29·720
Rangoon . .	41	30·002	29·968	29·931	29·876	29·814	29·760	29·760	29·788	29·820	29·893	29·940	29 996	29·879
Bassein . . .	27	30·015	29·975	29·935	29·874	29·813	29·758	29·757	29·790	29·823	29·900	29 950	30·009	29·883
Diamond Island .	41	29·993	29·970	29·934	29·877	29·802	29·746	29·751	29·779	29·808	29·878	29·927	29·980	29·870
Akyab . . .	20	30·041	30·004	29·956	29·880	29·796	29·701	29·693	29·740	29·798	29·897	29·962	30·029	29·875
Thayetmyo . .	134	29·925	29·860	29·810	29·741	29·684	29·611	29·613	29·649	29·691	29·792	29·861	29·924	29·763
Silchar . . .	104	29·983	29·937	29·864	29·779	29·705	29·585	29·567	29·616	29·694	29·813	29·906	29·975	29·785
Sibsagar . .	333	29·772	29·710	29·636	29·552	29·480	29·356	29·341	29·384	29·476	29·618	29·720	29·780	29·569
Dhubri . . .	115	29·973	29·902	29·809	29·713	29·665	29·529	29·507	29·568	29·672	29·815	29·919	29·985	29·755
Chittagong . .	87	29·983	29·939	29·877	29·795	29·708	29·598	29 582	29·639	29·714	29·829	29·907	29·976	29·796
Noakhali .	43	30·043	29·983	29·908	29·814	29·731	29·629	29·616	29·656	29·748	29·863	29·958	30·024	29·831
Comilla . . .	36	30·042	29·987	29·914	29·822	29·744	29·623	29·614	29·667	29·754	29·871	29·963	30·034	29·836
Sirajganj . .	49	30·026	29·965	29·874	29·772	29·706	29·580	29·572	29·629	29·722	29·862	29·964	30·026	29·808
Narayanganj . .	26	30·056	30·002	29·917	29·818	29·744	29·619	29·602	29·654	29·745	29·880	29·975	30·040	29·838
Barisal . . .	13	30·063	30·013	29·932	29·833	29·749	29·627	29·602	29·659	29·758	29·886	29·986	30·052	29·847
Mymensingh . .	59	30·021	29·966	29·878	29·786	29·724	29·591	29·579	29·632	29·721	29·851	29·951	30·014	29·810

TABLE VII.—*Normal mean monthly 8 A.M. pressures of 131 stations in India and Burma*—contd.

STATION.	Elevation in feet.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Faridpur . .	46	30·042	29·990	29·903	29·801	29·725	29·601	29·593	29·647	29·740	29·877	29·970	30·035	29·827
Jessore . .	33	30·047	29·993	29·899	29·796	29·718	29·591	29·576	29·631	29·735	29·880	29·981	30·047	29·825
Calcutta . .	21	30·070	30·011	29·911	29·801	29·717	29·584	29·571	29·629	29·731	29·890	30·002	30·071	29·832
Saugor Island . .	25	30·058	30·000	29·907	29·804	29·717	29·582	29·565	29·629	29·724	29·882	29·993	30·066	29·827
Krishnagar . .	47	30·033	29·976	29·877	29·764	29·686	29·554	29·538	29·601	29·705	29·858	29·972	30·040	29·800
Midnapore . .	149	29·946	29·886	29·787	29·672	29·583	29·458	29·445	29·507	29·607	29·767	29·882	29·949	29·707
Bankura . .	298	29·767	29·701	29·606	29·487	29·406	29·283	29·272	29·332	29·432	29·593	29·707	29·771	29·530
Raniganj . .	334	29·757	29·682	29·593	29·478	29·407	29·264	29·252	29·316	29·417	29·584	29·700	29·760	29·518
Burdwan . .	99	29·991	29·928	29·826	29·713	29·635	29·499	29·490	29·554	29·659	29·815	29·930	29·997	29·753
Naya Dumka . .	489	29·571	29·511	29·409	29·296	29·220	29·091	29·084	29·145	29·246	29·406	29·519	29·578	29·340
Berhampore . .	67	30·023	29·960	29·852	29·742	29·668	29·541	29·529	29·589	29·691	29·851	29·964	30·029	29·787
Rampur Boalia .	70	30·010	29·947	29·846	29·736	29·668	29·534	29·523	29·583	29·688	29·834	29·947	30·008	29·777
Malda . . .	72	30·018	29·950	29·836	29·727	29·657	29·524	29·509	29·573	29·672	29·832	29·959	30·025	29·774
Bogra . . .	61	30·002	29·941	29·844	29·742	29·679	29·551	29·536	29·597	29·695	29·834	29·936	30·000	29·780
Dinajpur . .	123	29·952	29·886	29·785	29·691	29·623	29·504	29·484	29·544	29·640	29·788	29·898	29·958	29·730
Rangpur . .	123	29·957	29·896	29·801	29·706	29·651	29·519	29·502	29·560	29·654	29·799	29·904	29·965	29·743
Jalpaiguri . .	284	29·784	29·721	29·631	29·544	29·492	29·363	29·334	29·397	29·487	29·633	29·746	29·796	29·577
Balasore . .	56	30·041	29·973	29·878	29·766	29·673	29·546	29·527	29·592	29·685	29·853	29·972	30·042	29·796
False Point . .	21	30·066	30·004	29·921	29·821	29·720	29·597	29·589	29·639	29·723	29·886	29·996	30·069	29·836
Cuttack . . .	80	30·006	29·946	29·856	29·754	29·655	29·532	29·521	29·579	29·660	29·828	29·940	30·013	29·774
Hazaribagh . .	2,007	28·013	27·968	27·901	27·810	27·723	27·610	27·598	27·649	27·745	27·897	27·987	28·026	27·827
Ranchi . .	2,128	27·889	27·838	27·779	27·694	27·608	27·490	27·472	27·527	27·621	27·771	27·856	27·893	27·703
Chaibassa . .	760	29·299	29·240	29·149	29·037	28·940	28·821	28·814	28·869	28·966	29·130	29·239	29·301	29·067
Gaya . . .	375	29·706	29·647	29·544	29·416	29·320	29·201	29·200	29·254	29·358	29·533	29·658	29·719	29·463
Dehri . . .	351	29·732	29·674	29·566	29·434	29·340	29·219	29·216	29·275	29·384	29·562	29·692	29·746	29·488
Patna . . .	183	29·911	29·851	29·736	29·608	29·525	29·404	29·397	29·453	29·560	29·733	29·863	29·940	29·665
Arrah . . .	190	29·887	29·824	29·714	29·590	29·505	29·376	29·369	29·431	29·538	29·716	29·842	29·904	29·641
Buxar . . .	239	29·849	29·793	29·681	29·546	29·455	29·332	29·325	29·389	29·497	29·673	29·805	29·867	29·601
Purnea . . .	125	29·954	29·887	29·782	29·674	29·612	29·481	29·467	29·523	29·628	29·786	29·901	29·962	29·721
Bhagalpur . .	160	29·907	29·849	29·742	29·623	29·551	29·421	29·401	29·473	29·580	29·744	29·867	29·931	29·675
Darbhanga . .	166	29·914	29·848	29·745	29·627	29·561	29·433	29·419	29·482	29·585	29·752	29·870	29·933	29·681
Motihari . .	224	29·837	29·772	29·661	29·553	29·486	29·359	29·347	29·409	29·513	29·673	29·793	29·857	29·605
Chapra . .	181	29·899	29·834	29·719	29·594	29·512	29·391	29·380	29·442	29·545	29·716	29·845	29·910	29·649
Benares . .	267	29·812	29·752	29·646	29·514	29·419	29·296	29·287	29·351	29·458	29·638	29·770	29·832	29·565
Allahabad . .	309	29·772	29·713	29·610	29·478	29·377	29·255	29·245	29·310	29·419	29·598	29·730	29·792	29·525
Gorakhpur . .	256	29·812	29·744	29·638	29·513	29·440	29·314	29·305	29·365	29·473	29·643	29·769	29·830	29·570
Lucknow . .	368	29·707	29·646	29·536	29·408	29·314	29·193	29·184	29·248	29·358	29·533	29·665	29·720	29·459

TABLE VII.—*Normal mean monthly 8 A.M. pressures of 131 stations in India and Burma*—contd.

STATION.	Elevation in feet.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Bareilly	568	29·481	29·416	29·316	29·193	29·105	28·988	28·979	29·037	29·147	29·323	29·443	29·498	29·244
Dehra Dun	2,233	27·768	27·725	27·669	27·579	27·507	27·402	27·384	27·434	27·533	27·687	27·775	27·799	27·605
Roorkee	887	29·144	29·088	28·998	28·881	28·791	28·674	28 672	28 728	28·839	29·009	29·121	29 165	28·926
Meerut	738	29·307	29·251	29·151	29·029	28·931	28·816	28·805	28·867	28 980	29·154	29·272	29·325	29·074
Delhi	718	29·336	29·282	29·184	29·059	28·952	28·834	28 823	28·885	29·005	29·176	29·298	29·356	29·099
Lahore	702	29·350	29·302	29·200	29 068	28·945	28·820	28 811	28·879	29·005	29·184	29·316	29·373	29·104
Ludhiana	812	29·229	29·173	29·080	28 958	28·853	28·729	29·724	28·787	28·911	29·081	29·196	29·248	28·997
Sialkot	830	29·200	29·151	29·060	28·934	28·823	28·698	28·690	28·757	28 875	29·051	29·171	29·220	28·969
Rawalpindi	1,652	28·362	28·323	28·249	28·147	28·041	27·918	27·892	27·956	28·092	28·266	28·365	28·409	28·168
Peshawar	1,110	28·974	28·937	28·849	28 728	28·597	28·443	28·415	28 481	28·631	28·822	28·943	28·996	28·735
D. I. Khan	573	29·509	29·469	29·366	29·233	29·095	28·940	28·919	28 986	29·123	29·322	29·465	29·530	29·246
Mooltan	420	29·681	29·633	29·517	29·380	29·235	29·085	29·064	29·140	29·279	29·476	29·630	29·699	29·402
Sirsa	662	29·396	29·345	29·243	29·114	28·994	28·877	28·858	28·926	29·051	29·228	29·355	29·415	29·150
Jacobabad	186	29·910	29·865	29·735	29·604	29·463	29·318	29·285	29·361	29·507	29·704	29·861	29·930	29·629
Hyderabad	117	29·985	29·945	29·823	29·703	29·563	29·424	29·386	29·459	29·593	29·775	29·920	30·002	29·715
Kurrachee	49	30·054	30·016	29·918	29·805	29·685	29·548	29·510	29·589	29·724	29·882	30·004	30·071	29·817
Bhuj	395	29·679	29·636	29·557	29·455	29·355	29·236	29·195	29·266	29·392	29·531	29·628	29·684	29·468
Jeypore	1,431	28·618	28·577	28 495	28·395	28·291	28·182	28·149	28·213	28·340	28·502	28·600	28·645	28·417
Sambhar	1,254	28·785	28·741	28·658	28·555	28·449	28·339	29·305	28·371	28·495	28·663	28·769	28·821	28·579
Ajmere	1,611	28·441	28·399	28·328	28·230	28·123	28·018	27·981	28·044	28·160	28·326	28·425	28·471	28·246
Deesa	466	29·598	29·562	29·482	29·391	29·290	29·177	29·132	29·209	29·324	29·463	29·560	29·614	29·400
Rajkot	429	29·628	29·601	29·532	29·448	29·346	29·233	29·196	29·270	29·378	29·506	29·586	29·637	29·447
Nowgong	757	29·319	29·266	29·169	29·053	28·938	28·833	28·815	28·876	28·985	29·161	29·284	29·339	29·086
Indore	1,823	28·200	28·168	28·112	28·033	27·949	27·851	27·818	27·879	27·967	28·109	28·187	28·224	28·041
Neemuch	1,630	28·397	28·361	28 294	28·212	28·111	28·010	27·974	28·040	28·145	28·299	28·392	28·431	28·222
Surat	36	30·027	29·999	29·939	29·861	29·787	29·671	29·638	29·701	29·799	29·902	29·975	30·029	29·856
Agra	555	29·531	29·476	29·372	29·250	29·137	29·020	29·005	29·070	29·189	29·369	29·498	29·554	29·289
Jhansi	858	29·213	29·168	29·078	28·961	28·850	28·738	28·714	28·774	28·889	29·053	29·174	29·226	28·987
Belgaum	2,524	27·484	27·466	27·431	27·375	27·328	27·267	27·264	27·298	27·347	27·397	27·440	27·484	27·382
Sholapur	1,590	28·446	28·411	28·350	28·280	28·223	28·167	28·158	28·195	28·254	28·334	28·396	28·448	28·305
Poona	1,840	28·193	28·164	28·120	28·059	28·001	27·912	27·896	27·944	28·015	28·100	28·159	28·207	28·064
Malegaon	1,430	28·608	28·572	28·518	28·441	28·369	28·281	28·252	28·306	28·388	28·505	28·580	28·623	28·454
Akola	930	29·113	29·066	28·996	28·907	28·830	28·749	28·734	28·785	28·858	28·993	29·082	29·135	28·937
Amraoti	1,215	28·820	28·772	28·706	28·617	28·533	28·453	28·438	28·485	28·559	28·702	28·792	28·844	28·643
Khandwa	1,044	28·998	28 958	28·891	28·804	28·714	28·626	28·600	28·655	28·736	28·873	28·962	29·012	28·819
Hoshangabad	1,020	29·039	28·999	28·922	28·829	28·734	28·635	28·610	28·667	28·752	28·913	29·017	29·069	28·849
Nagpur	1,025	29·022	28·975	28·899	28·803	28·701	28·620	28·608	28·658	28·734	28·885	28·984	29·040	28·827

TABLE VII.—*Normal mean monthly 8 A.M. pressures of 131 stations in India and Burma*—contd.

STATION.	Elevation in feet.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Chanda	634	29·423	29·370	29·289	29·191	29·092	29·024	29·022	29·071	29·141	29·280	29·378	29·439	29·227
Seoni	2,033	27·998	27·960	27·901	27·816	27·724	27·628	27·608	27·654	27·735	27·889	27·970	28·013	27·825
Jubbulpore	1,327	28·720	28 673	28·601	28·501	28·398	28·294	28·273	28·328	28·424	28·590	28·694	28·741	28·520
Saugor	1,762	28·263	28·218	28·151	28·073	27·970	27·864	27·836	27·891	28·001	28·159	28·248	28·288	28·080
Raipur	970	29·079	29·028	28·947	28·849	28·750	28·652	28·639	28·689	28·773	28·940	29·042	29·099	28·874
Sutna	1,040	29·014	28·963	28·879	28·760	28·652	28·537	28·522	28·587	28·692	28·868	28·985	29·038	28·791
Sambalpur	463	29·586	29·538	29·444	29·338	29·244	29·129	29·118	29·187	29·277	29·430	29·551	29·607	29·371
Hyderabad (Deccan)	1,690	28·353	28·329	28·267	28·203	28·112	28·042	28·028	28·068	28·116	28·219	28·289	28·345	28·197
Bombay	37	30·000	29·985	29·936	29·867	29·813	29·712	29·701	29·752	29·830	29·895	29·953	30·004	29·871
Ratnagiri	110	29·905	29·881	29·844	29·776	29·728	29·661	29·662	29·701	29·756	29·794	29·843	29·897	29·787
Goa	23	30·022	29·993	29·948	29·893	29·840	29·788	29·802	29·833	29·890	29·914	29·955	30·007	29·907
Karwar	44	29·977	29·957	29·918	29·856	29·811	29·770	29·785	29·812	29·858	29·880	29·913	29·964	29 875
Cochin	10	29·996	29·987	29·958	29·903	29·868	29·877	29·898	29·906	29·936	29·934	29·944	29·975	29·932
Calicut	27	29·994	29·978	29·944	29·884	29·846	29·843	29·869	29·878	29·912	29·916	29·928	29·972	29 914
Mangalore	65	29·958	29·942	29·906	29·842	29·806	29·787	29·813	29·830	29·868	29 878	29·893	29·943	29·872
Madura	447	29·581	29·570	29·526	29·449	29·387	29·364	29·381	29·396	29·429	29·464	29·502	29·550	29·467
Salem	940	29·127	29·111	29·061	28·988	28·926	28·903	28·916	28·934	28·973	29·003	29·039	29·098	29·007
Coimbatore	1,348	28·682	28·668	28·628	28·556	28·500	28·479	28·492	28·509	28·544	28·573	28·608	28·659	28·575
Mercara	3,781	26·310	26·289	26·269	26·227	26·187	26·158	26·170	26·179	26·212	26·232	26·251	26·284	26·231
Bangalore Fort	3,021	27·039	27·026	26·995	26·943	26·888	26·859	26·863	26·881	26·918	26·956	26·985	27·030	26·949
Negapatam	31	30·005	29·992	29·944	29·870	29·796	29·770	29·787	29·805	29·847	29·882	29·922	29·977	29·883
Trichinopoly	255	29·791	29·776	29·727	29·647	29·580	29·555	29·573	29·590	29·625	29·663	29·706	29·765	29·667
Madras	22	30·049	30·020	29·961	29·880	29·789	29·750	29·768	29·792	29·832	29·892	29·950	30·022	29·892
Masulipatam	15	30·053	30·012	29·955	29·864	29·756	29·686	29·702	29·739	29·781	29·884	29·970	30·040	29·870
Kurnool	923	29·123	29·082	29·015	28·946	28·889	28·842	28·844	28·881	28·927	28·993	29·073	29·138	28·979
Bellary	1,475	28·557	28·516	28·464	28·399	28·345	28·303	28·309	28·337	28·385	28·443	28·502	28·556	28·426
Rajahmundry	112	29·945	29·891	29·844	29·763	29·659	29·575	29·580	29·617	29·667	29·787	29·878	29·956	29·764
Cocanada	26	30·039	29·996	29·932	29·846	29·738	29·648	29·652	29·689	29·743	29·863	29·955	30·033	29·844
Vizagapatam	31	30·042	29·994	29·933	29·838	29·734	29·621	29·626	29·666	29·730	29·865	29·965	30·037	29·838
Quetta	5,502	24·681	24·661	24.649	24·621	24·577	24·477	24·425	24·475	24·593	24·723	24·764	24·741	24·599
Murree	6,344	23·853	23·815	23·838	23·819	23·782	23·720	23·696	23·734	23·819	23·908	23·922	23·908	23·818
Simla	7,224	23·122	23·079	23·110	23·102	23·071	23·007	22·972	23·015	22·097	23·180	23·183	23·168	23·092
Chakrata	6,977	23·328	23·296	23·324	23·313	23·269	23·197	23·170	23·212	23·287	23·365	23·376	23·367	23·293
Ranikhet	6,069	24·135	24·099	24·105	24·083	24·041	23·956	23·939	23·977	24·057	24·149	24·169	24·166	24·073
Darjeeling	7,421	22·978	22·942	22·968	22·955	22·942	22·886	22·877	22·913	23·000	23·054	23·060	23·034	22·967
Mount Abu	3,945	26·138	26·116	26·092	26·054	25·975	25·869	25·822	25·869	25·982	26·116	26·164	26·168	26·030

TABLE VII.—*Normal mean monthly 8 A.M. pressures of 131 stations in India and Burma*—concld.

STATION.	Elevation in feet.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Pachmarhi . .	3,518	26·560	26·529	26·497	26·443	26·360	26·251	26·219	26·274	26·353	26·493	26·549	26·579	26·426
Wellington . .	6,200	24·309	24·313	24·310	24·278	24·236	24·193	24·196	24·204	24·228	24·262	24·275	24·302	24·259
Colombo . .	40	29·952	29·954	29·933	29·885	29·854	29·864	29 879	29·886	29·916	29·915	29·925	29·933	29·908
Aden . . .	94	29·984	29·955	29·902	29·845	29·770	29·661	29·626	29·650	29·748	29·873	29·958	30·001	29·831

In the following table the normal mean 8 A.M. pressure reduced to sea-level and corrected to constant gravity (Lat. 45°) is given for each month of the year for 121 stations in India and Burma.

TABLE VIII.—*Normal mean monthly 8 A.M. pressures (reduced to sea-level and constant gravity at Lat. 45°) of 121 stations in India and Burma.*

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	Septembe	October.	November.	December.	Year.
	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+
Moulmein	·970	·922	·894	·868	·800	·759	·762	·788	·814	·878	·923	·974	·863
Toungoo	·983	·941	·889	·832	·769	·718	·718	·742	·783	·868	·924	·986	·846
Rangoon	·981	·946	·909	·854	·792	·738	·738	·766	·798	·871	·918	·975	·857
Bassein	·995	·931	·892	·830	·775	·715	·713	·746	·785	·862	·912	·972	·844
Diamond Island . . .	·969	·946	·911	·852	·778	·722	·727	·755	·784	·854	·903	·956	·846
Akyab	1·004	·967	·919	·843	·759	·664	·656	·703	·761	·860	·925	·992	·838
Thayetmyo	·991	·935	·878	·809	·760	·687	·689	·725	·766	·868	·940	1·004	·838
Silchar	1·045	·997	·923	·836	·761	·639	·621	·671	·750	·869	·965	1·037	·843
Sibsagar	1·085	1·017	·937	·847	·771	·643	·627	·671	·765	·910	1·022	1·090	·865
Dhubri	1·050	·978	·882	·784	·734	·597	·575	·637	·741	·885	·993	1·062	·827
Chittagong	1·023	·976	·913	·830	·741	·632	·617	·674	·748	·864	·943	1·014	·831
Noakhali	1·035	·974	·898	·804	·721	·619	·606	·646	·738	·853	·949	1·015	·822
Comilla	1·027	·972	·899	·806	·728	·607	·598	·651	·738	·855	·948	1·019	·821
Sirajganj	1·027	·965	·874	·771	·705	·579	·571	·628	·721	·861	·963	1·025	·808
Narayanganj . . .	1·025	·971	·882	·784	·712	·589	·576	·628	·719	·854	·950	1·015	·809
Barisal	1·022	·972	·891	·791	·707	·585	·560	·617	·716	·844	·944	1·011	·805
Mymensingh . . .	1·035	·979	·890	·797	·734	·601	·589	·642	·732	·862	·964	1·028	·821
Faridpur	1·038	·986	·898	·795	·719	·595	·587	·641	·734	·871	·964	1·029	·821
Jessore	1·028	·974	·880	·776	·697	·571	·556	·611	·715	·860	·962	1·028	·805
Calcutta	1·038	·979	·878	·768	·683	·551	·538	·596	·698	·857	·969	1·039	·799

TABLE VIII.—*Normal mean monthly 8 A.M. pressures (reduced to sea-level and constant gravity at Lat. 45°) of 121 stations in India and Burma*—contd.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October	November.	December.	Year.
	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+
Saugor Island	1·028	·970	·876	·773	·686	·551	·534	·598	·693	·851	·963	1·037	·797
Krishnagar	1·032	·974	·873	·760	·681	·550	·534	·597	·701	·854	·969	1·039	·797
Midnapore	1·049	·987	·884	·768	·677	·553	·540	·603	·703	·864	·983	1·054	·805
Bankura	1·034	·964	·860	·735	·649	·529	·520	·580	·681	·845	·969	1·040	·784
Raniganj	1·062	·981	·884	·762	·686	·544	·533	·598	·701	·871	·998	1·064	·807
Burdwan	1·043	·978	·874	·759	·680	·544	·535	·599	·705	·862	·980	1·048	·800
Naya Dumka	1·052	·983	·867	·741	·659	·533	·527	·591	·694	·859	·989	1·057	·792
Berhampore	1·041	·979	·868	·758	·683	·556	·544	·604	·707	·867	·981	1·047	·803
Rampur Boalia	1·033	·969	·867	·756	·687	·553	·542	·602	·707	·854	·968	1·030	·797
Malda	1·047	·977	·862	·751	·680	·547	·532	·597	·696	·857	·985	1·051	·799
Bogra	1·019	·957	·859	·756	·692	·564	·547	·610	·709	·848	·951	1·016	·794
Dinajpur	1·037	·969	·865	·768	·711	·580	·561	·621	·717	·866	·980	1·042	·810
Rangpur	1·044	·980	·881	·785	·730	·597	·578	·637	·732	·878	·986	1·050	·823
Jalpaiguri	1·041	·977	·882	·789	·734	·603	·574	·638	·731	·879	·999	1·054	·825
Balasore	1·046	·978	·881	·768	·674	·548	·539	·594	·687	·856	·976	1·047	·800
False Point	1·029	·967	·884	·784	·682	·561	·552	·602	·686	·849	·959	1·032	·799
Cuttack	1·032	·971	·880	·776	·676	·554	·543	·601	·683	·852	·965	1·040	·798
Hazaribagh	1·065	1·003	·878	·744	·644	·534	·541	·598	·699	·875	1·007	1·077	·795
Ranchi	1·049	·981	·866	·740	·636	·524	·532	·585	·685	·860	·982	1·058	·792
Chaibassa	1·049	·978	·869	·743	·621	·523	·521	·579	·676	·845	·976	1·054	·786
Gaya	1·056	·993	·881	·742	·639	·523	·526	·581	·685	·866	1·003	1·072	·797
Dehri	1·059	·996	·878	·737	·635	·519	·519	·579	·687	·872	1·010	1·072	·797
Patna	1·058	·995	·875	·743	·658	·537	·531	·587	·695	·870	1·005	1·086	·803
Arrah	1·042	·976	·862	·732	·643	·515	·509	·572	·680	·861	·992	1·059	·787
Buxar	1·059	·999	·882	·741	·645	·524	·518	·582	·690	·871	1·009	1·076	·800
Purnea	1·041	·973	·864	·754	·690	·559	·544	·601	·707	·865	·985	1·048	·803
Bhagalpur	1·029	·969	·858	·737	·663	·533	·522	·585	·692	·858	·985	1·052	·790
Darbhanga	1·045	·976	·870	·748	·679	·551	·536	·601	·705	·874	·996	1·062	·804
Motihari	1·035	·965	·850	·736	·666	·539	·527	·589	·696	·858	·983	1·053	·791
Chapra	1·046	·978	·859	·728	·644	·523	·513	·576	·679	·860	·987	1·056	·787
Benares	1·053	·990	·878	·738	·636	·515	·508	·573	·680	·865	1·006	1·073	·793
Allahabad	1·057	·993	·882	·741	·634	·514	·507	·573	·683	·867	1·008	1·076	·795
Gorakhpur	1·047	·972	·860	·729	·652	·526	·514	·582	·688	·861	·995	1·062	·791
Lucknow	1·061	·998	·878	·737	·636	·517	·509	·576	·686	·868	1·012	1·074	·796

TABLE VIII.—*Normal mean monthly 8 A.M. pressures (reduced to sea-level and constant gravity at Lat. 45°) of 121 stations in India and Burma*—contd.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+
Bareilly	1·057	·983	·869	·727	·627	·511	·505	·567	·679	·865	1·005	1·071	·789
Dehra Dun	1·089	1·032	·915	·773	·671	·553	·549	·603	·718	·911	1·057	1·115	·823
Roorkee	1·067	·998	·890	·739	·628	·512	·518	·575	·694	·882	1·024	1·085	·801
Meerut	1·068	1·001	·881	·733	·618	·505	·500	·564	·682	·875	1·018	1·084	·794
Delhi	1·070	1·008	·892	·740	·617	·499	·495	·561	·685	·869	1·016	1·087	·795
Lahore	1·080	1·023	·902	·744	·602	·474	·471	·537	·673	·873	1·031	1·103	·793
Ludhiana	1·072	1·007	·895	·742	·615	·491	·494	·559	·689	·879	1·023	1·089	·796
Sialkot	1·070	1·009	·897	·741	·604	·478	·480	·549	·674	·869	1·019	1·087	·790
Rawalpindi	1·082	1·033	·912	·762	·613	·469	·452	·524	·685	·908	1·065	1·137	·799
Peshawar	1·113	1·056	·946	·788	·625	·451	·435	·503	·670	·895	1·055	1·130	·806
D. I. Khan	1·108	1·057	·941	·786	·630	·470	·453	·519	·667	·887	1·051	1·129	·808
Mooltan	1·109	1·054	·927	·773	·616	·462	·445	·523	·665	·875	1·046	1·124	·802
Sirsa	1·077	1·019	·898	·742	·605	·484	·473	·542	·676	·869	1·021	1·094	·792
Jacobabad	1·074	1·025	·889	·752	·605	·460	·428	·506	·653	·856	1·017	1·094	·780
Hyderabad	1·065	1·023	·896	·774	·633	·491	·454	·528	·662	·834	·995	1·079	·786
Kurrachee	1·057	1·019	·919	·803	·686	·547	·510	·589	·724	·884	1·006	1·075	·818
Bhuj	1·049	1·001	·915	·806	·724	·578	·541	·614	·740	·881	·988	1·053	·824
Jeypore	1·100	1·049	·919	·781	·656	·546	·528	·601	·732	·914	1·058	1·125	·828
Sambhar	1·085	1·033	·908	·767	·647	·532	·509	·583	·710	·901	1·047	1·119	·815
Ajmere	1·125	1·069	·942	·800	·678	·564	·542	·614	·737	·931	1·089	1·147	·844
Deesa	1·048	1·005	·913	·811	·709	·593	·554	·633	·747	·892	1·001	1·062	·831
Rajkot	1·032	1·001	·923	·830	·725	·610	·578	·653	·762	·891	·980	1·038	·835
Nowgong	1·081	1·016	·902	·762	·629	·530	·524	·587	·696	·885	1·035	1·099	·812
Indore	1·061	1·012	·913	·785	·697	·606	·587	·657	·751	·905	1·018	1·081	·839
Neemuch	1·077	1·024	·908	·785	·676	·574	·553	·628	·738	·905	1·033	1·093	·833
Surat	1·008	·980	·919	·841	·765	·650	·617	·680	·779	·881	·956	1·010	·841
Agra	1·086	1·024	·904	·763	·637	·520	·514	·581	·702	·895	1·041	1·108	·815
Jhansi	1·077	1·022	·907	·764	·636	·532	·522	·584	·699	·877	1·022	1·087	·805
Belgaum	·986	·955	·892	·818	·768	·718	·726	·764	·817	·865	·928	·987	·852
Sholapur	1·030	·979	·901	·802	·748	·697	·691	·739	·800	·886	·962	1·032	·856
Poona	1·046	1·003	·925	·836	·778	·685	·685	·736	·812	·903	·988	1·060	·871
Malegaon	1·054	1·003	·912	·810	·733	·650	·630	691	·777	·905	1·003	1·070	·853
Akola	1·029	·969	·882	·772	·688	·615	·609	·659	·739	·878	1·000	1·053	·824
Amraoti	1·036	·977	·892	·778	·680	·613	·611	·660	·738	·891	1·000	1·069	·829

TABLE VIII.—*Normal mean monthly 8 A.M. pressures (reduced to sea-level and constant gravity at Lat. 45°) of 121 stations in India and Burma*—concld.

STATION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+	29+
Khandwa	1·044	·990	·906	·793	·699	·619	·600	·658	·742	·888	1·006	1·057	·834
Hoshangabad	1·076	1·012	·918	·800	·689	·602	·587	·647	·733	·906	1·041	1·099	·843
Nagpur	1·036	·975	·882	·767	·649	·584	·584	·635	·713	·873	1·000	1·063	·814
Chanda	1·033	·971	·877	·765	·653	·596	·601	·650	·723	·866	·985	1·051	·814
Seoni	1·056	1·001	·899	·764	·642	·568	·575	·624	·709	·888	1·008	1·082	·818
Jubbulpore	1·078	1·017	·910	·776	·651	·558	·553	·611	·710	·896	1·039	1·102	·825
Saugor	1·069	1·010	·893	·769	·648	·551	·547	·606	·723	·899	1·030	1·095	·820
Raipur	1·038	·973	·874	·754	·636	·557	·556	·610	·689	·867	·996	1·062	·801
Sutna	1·071	1·007	·900	·750	·620	·518	·515	·582	·687	·882	·928	1·094	·780
Sambalpur	1·021	·965	·861	·745	·642	·532	·529	·597	·686	·845	·979	1·042	·787
Hyderabad (Deccan)	1·047	1·004	·915	·826	·725	·667	·668	·710	·751	·870	·965	1·038	·849
Bombay	·978	·963	·914	·844	·791	·691	·679	·729	·807	·872	·930	·982	·848
Ratnagiri	·956	·931	·894	·826	·777	·704	·711	·749	·805	·843	·892	·947	·836
Goa	·959	·930	·885	·830	·777	·725	·738	·770	·828	·851	·892	·944	·844
Karwar	·954	·934	·894	·832	·788	·746	·761	·787	·834	·855	·890	·941	·851
Cochin	·934	·925	·895	·840	·806	·815	·836	·844	·874	·873	·882	·913	·870
Calicut	·961	·945	·912	·850	·803	·799	·826	·835	·870	·873	·885	·928	·874
Mangalore	·956	·940	·904	·840	·802	·785	·810	·828	·866	·875	·890	·941	·870
Madura	·974	·960	·910	·830	·766	·742	·761	·777	·810	·849	·892	·941	·851
Salem	1·026	1·005	·942	·860	·797	·775	·794	·813	·853	·883	·930	·993	·889
Coimbatore	1·004	·983	·931	·847	·789	·772	·790	·809	·845	·878	·919	·976	·879
Bangalore Fort	·984	·995	·934	·850	·801	·785	·803	·820	·862	·905	·955	1·025	·893
Negapatam	·966	·953	·904	·830	·755	·728	·746	·766	·806	·841	·882	·938	·843
Prichinopoly	·986	·969	·916	·833	·766	·741	·759	·778	·813	·851	·898	·958	·816
Madras	1·002	·972	·914	·832	·742	·702	·721	·745	·786	·844	·903	·975	·845
Masulipatam	1·003	·962	·906	·814	·705	·636	·652	·689	·731	·834	·920	·990	·820
Kurnool	1·021	·967	·877	·800	·740	·698	·707	·748	·795	·862	·960	1·027	·850
Bellary	1·017	·961	·883	·806	·754	·716	·727	·759	·811	·875	·948	1·015	·856
Rajahmundry	·998	·942	·894	·812	·708	·622	·629	·666	·716	·836	·930	1·009	·814
Cocanada	1·002	·957	·894	·808	·700	·609	·613	·650	·703	·824	·916	·994	·806
Vizagapatam	1·012	·963	·902	·806	·702	·588	·595	·635	·699	·833	·935	1·008	·807
Colombo	·918	·919	·899	·850	·820	·831	·846	·852	·882	·880	·892	·899	·874
Aden	1·012	·983	·930	·871	·795	·685	·651	·675	·774	·899	·984	1·028	·857

The following tables give geographical summaries of the pressure variation data according to the two groups of divisions employed in the corresponding tables of temperature variation data, that is, for the eighteen divisions for which variation data were given in the "Geographical Summaries" in the Annual Reports previously to 1891 and for the eleven meteorological provinces in Table I of each monthly review :—

TABLE IX.—*Geographical summary of the pressure variation data of Table II in the monthly weather reviews of 1894.*

Meteorological Province.	Number of stations.	January.	February.	March.	April	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		"	"	"	"	"	"	"	"	"	"	"	"	"
North-West Himalaya	7	−·032	+·042	−·024	−·004	−·012	−·017	+·013	−·034	−·025	−·033	+·015	−·012	−·010
Sikkim Himalaya, and Nepal.	2	−·020	+·041	−·031	−·018	−·038	−·007	+·014	−·030	−·037	−·052	+·003	+·012	−·014
Punjab Plains . .	4	+·009	+·019	−·005	−·027	−·056	−·027	+·039	−·034	−·023	−·052	+·021	+·013	−·010
Gangetic Plain . .	9	−·019	+·013	−·013	−·024	−·066	−·019	+·017	−·027	−·026	−·054	+·026	+·002	−·016
Western Rajputana .	2—3	−·008	+·012	+·001	−·033	−·003	−·032	+·007	−·025	−·020	−·042	+·033	+·011	−·008
Eastern Rajputana and Central India.	3—4	−·010	−·003	−·006	−·020	−·021	−·027	+·010	−·022	−·032	−·049	+·023	−·008	−·014
Nerbudda Valley .	2—3	−·019	−·018	−·013	−·037	−·010	−·027	−·009	−·017	−·036	−·044	+·034	−·011	−·017
Chota Nagpur . .	1	−·025	+·013	−·024	−·029	−·044	−·022	−·003	−·030	−·018	−·053	+·022	−·005	−·018
Lower Bengal . .	5	−·030	+·006	−·025	−·016	−·058	−·012	0	−·015	−·007	−·033	+·038	+·007	−·012
Assam and Cachar .	3	−·044	−·004	−·046	−·025	−·057	−·023	+·002	−·019	−·008	−·042	+·040	+·009	−·018
Orissa and Sambalpur	2	−·035	+·004	−·035	−·021	−·049	−·027	−·006	−·020	−·028	−·040	+·043	−·011	−·019
Central Provinces (South) and Berar.	5	−·015	+·001	−·012	−·025	−·007	−·025	−·002	−·020	−·036	−·044	+·035	−·008	−·013
Konkan . . .	3	−·015	+·003	−·016	−·009	+·029	−·021	−·001	−·021	−·013	−·015	+·047	+·015	−·001
Malabar Coast . .	1	−·012	+·005	−·018	−·006	+·012	−·011	+·003	−·023	−·014	−·006	+·019	+·006	−·004
Deccan, Hyderabad and Mysore.	5	−·013	+·012	−·013	−·008	+·018	−·017	−·003	−·023	−·021	−·022	+·038	+·007	−·004
Eastern Coast and Carnatic.	4	−·019	+·004	−·029	−·025	−·022	−·028	−·010	−·036	−·030	−·024	+·036	+·009	−·015
Arakan and Pegu .	4	−·050	+·001	−·031	−·029	−·020	−·022	−·004	−·023	−·022	−·006	+·048	+·004	−·013
Bay Islands . .	1	−·042	+·001	−·028	−·031	−·006	−·021	−·012	−·041	+·008	+·023	+·043	+·009	−·008
Extra Tropical India .	40—41	−·020	+·014	−·018	−·022	−·039	−·021	+·011	−·026	−·024	−·044	+·026	+·001	−·014
Tropical India . .	25	−·023	+·004	−·021	−·019	−·005	−·022	−·004	−·025	−·024	−·022	+·040	+·003	−·010
Whole India . .	65—66	−·021	+·010	−·019	−·021	−·026	−·021	+·005	−·025	−·023	−·036	+·031	+·002	−·012

TABLE X.—*Variation of the mean pressure of each month of 1894 from the normal in the eleven meteorological provinces of India.*

Meteorological Province.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	"	"	"	"	"	"	"	"	"	"	"	"	"
Burma Coast and Bay Islands.	−·051	+·006	−·033	−·035	−·016	−·017	−·004	−·025	−·015	0	+·055	+·013	−·012
Burma Inland . . .	−·035	+·016	?	−·016	−·012	−·016	−·016	−·035	−·016	−·012	+·052	+·017	−·006
Assam	−·039	+·010	−·041	−·020	−·058	−·013	+·007	−·016	+·001	−·046	+·044	+·004	−·013
Bengal and Orissa . . .	−·029	+·012	−·031	−·014	−·054	−·018	+·007	−·015	−·005	−·037	+·042	+·005	−·012

TABLE X.—*Variation of the mean pressure of each month of 1894 from the normal in the eleven meteorological provinces of India*—concluded.

Meteorological Province.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	"	"	"	"	"	"	"	"	"	"	"	"	"
Gangetic Plain and Chota Nagpur.	−·029	+·012	−·020	−·016	−·062	−·019	+·014	−·021	−·013	−·049	+·033	+·001	−·015
Upper Sub-Himalayas . .	−·010	+·024	−·010	−·016	−·058	−·022	+·026	−·033	−·020	−·049	+·025	+·003	−·011
Indus Valley and North-West Rajputana.	+·001	+·015	−·006	−·028	−·028	−·033	+·021	−·027	−·017	−·041	+·025	+·004	−·008
East Rajputana, Central India and Gujarat.	−·011	+·006	−·002	−·024	0	−·031	+·005	−·016	−·022	−·039	+·039	−·014	−·007
Deccan	−·015	+·005	−·008	−·017	−·002	−·025	+·002	−·015	−·026	−·037	+·041	−·008	−·009
West Coast	−·021	+·001	−·022	−·011	+·022	−·022	−·005	−·024	−·018	−·013	+·038	+·008	−·006
South India	−·023	+·006	−·025	−·019	−·007	−·018	−·003	−·032	−·027	−·023	+·039	+·012	−·009

The following gives a summary of the more important abnormal features of the distribution of pressure during the four periods of the year 1894:—

I. The cold-weather period.—The mean pressure of the whole Indian area was ·020″ in defect in January and ·010″ in excess in February, and hence ·005″ in defect on the mean of the cold weather period. Pressure was relatively to the general condition in slight excess in the greater part of the Peninsula and North-West India, and in slight defect in North-Eastern India and Burma in January and in slight excess in Northern India, and very slightly in defect in the Peninsula in February. As is shown by the following statement, the pressure anomalies for the period were very small in amount and of little or no significance. The table gives the mean anomalies of the larger political divisions for each of the months of January and February 1894 and for the cold weather period:—

Political Division.	Variation of mean 8 A.M. pressure from normal.		Pressure anomaly.		
	January 1894.	February 1894.	January 1894.	February 1894.	Cold weather period 1894.
	"	"	"	"	"
Burma	−·051	+·006	−·031	−·004	−·018
Assam	−·039	+·010	−·019	0	−·010
Bengal and Orissa . .	−·029	+·012	−·009	+·002	−·004
Bihar and Chota Nagpur	−·034	+·011	−·014	+·001	−·007
North-Western Provinces and Oudh.	−·018	+·019	+·002	+·009	+·006
Punjab	−·003	+·022	+·017	+·012	+·015
Rajputana . . .	−·012	+·008	+·008	−·002	+·003
Central India . . .	−·008	+·006	+·012	−·004	+·004
Central Provinces . .	−·014	+·006	+·006	−·004	+·001
Bombay . . .	−·019	+·002	+·001	−·008	−·004
Madras	−·023	+·006	−·003	−·004	−·004

The only important feature of the pressure conditions was shown by the data of the hill stations. Pressure was in considerable defect in January at these stations as compared with the nearest plain stations. The following table gives the vertical pressure anomalies of eight pairs of stations for the period, November 1893 to February 1894:—

Hill and Plain Stations.	Vertical pressure anomaly.				Mean of period, November 1893 to February 1894.
	November 1893.	December 1893.	January 1894.	February 1894.	
	"	"	"	"	"
Quetta and Jacobabad .	−·011	+·041	−·034	−·015	−·005
Leh and Lahore . .	−·009	+·041	−·081	+·048	0
Kailang and Lahore .	−·018	?	−·029	+·033	?
Murree and Peshawar .	0	+·020	−·056	+·014	−·006
Simla and Ludhiana .	−·019	+·008	−·028	+·020	−·005
Darjeeling and Calcutta .	0	+·017	+·019	+·045	+·020
Mount Abu and Deesa .	−·021	−·002	−·028	−·003	−·014
Pachmarhi and Nagpur .	+·015	+·006	+·011	+·011	+·011

The relative deficiency at the hill stations was moderate in November and large in January. A significant change occurred in February as the vertical pressure anomalies changed in character and indicated a moderate to considerable excess at the level of the hill stations in Upper India.

The chief features of the deficiency of pressure at the higher level stations in January were as follows:—

1st.—It was greatest in amount at the most elevated stations,

2nd.—It decreased in amount eastwards, and was small at Chakrata and Ranikhet. In the Eastern Himalayas (as represented by Darjeeling) pressure was, on the other hand, relatively in excess.

3rd.—The deficiency also decreased in amount southwards, and was practically nil at Pachmarhi. At the hill stations in Southern India and (probably) Ceylon, pressure was relatively in excess.

The most noteworthy feature of the pressure conditions in the cold weather was the change from negative vertical anomalies in January to positive vertical anomalies in February in which month pressure was more or less in excess at all the hill stations relatively to the plains.

Persistent deficiency of pressure during the cold weather period at the hill stations in Northern India, relatively to the neighbouring plain stations, is invariably associated with unusually disturbed weather and with abnormally heavy precipitation in the hill districts and plains of Northern India, and excess of pressure with less disturbed weather than usual. As is shown in the concluding summary, the cold weather of 1893-94 illustrates both of these relations.

II. The hot-weather period.—Weather was slightly more disturbed and showery than usual in the month of March, more especially in Upper India. April and May were, on the other hand, drier and warmer than usual and temperature was excessive in North-Eastern India in May.

The mean pressure of the Indian area was below the normal during the whole period :—

Month.	Mean pressure variation.			
	Whole of India.		Tropical India.	Extra Tropical India.
	From data of Table I.	From data of Table II.		
	"	"	"	"
March	−·017	−·019	−·021	−·018
April	−·019	−·021	−·019	−·022
May	−·023	−·026	−·005	−·039

The deficiency averaged ·020″ during this period, and was throughout moderate in amount. It varied very slightly, and hence represented a steady deficiency of pressure, nearly constant in amount, over the Indian area during this period.

The following table gives the local variations of pressure or anomalies for each month and the mean of the period in each of the larger divisions :—

Meteorological Province.	Pressure anomaly.			
	March 1894.	April 1894.	May 1894.	Period, March to May 1894.
	"	"	"	"
Burma Coast and Bay Islands.	−·016	−·016	+·007	−·008
Burma Inland . .	?	?	+·026	?
Assam	−·024	−·001	−·035	−·020
Bengal and Orissa . .	−·014	+·005	−·031	−·013
Gangetic Plain and Chota Nagpur.	−·003	+·003	−·039	−·013
Upper Sub-Himalayas .	+·007	+·003	−·035	−·008
Indus Valley and North-West Rajputana.	+·011	−·009	−·005	−·001
East Rajputana, Central India, and Gujarat.	+·015	−·005	+·023	+·011
Deccan	+·009	+·002	+·021	+·011
West Coast . . .	−·005	+·008	+·045	+·016
South India . . .	−·008	0	+·016	+·003

The local variations were small in April, but were moderate to large in amount in March and May. The chief features were—

1st.—A considerable deficiency in North-Eastern India, (*i. e.*, Assam, Bengal, Bihar and Chota Nagpur) and Burma. It was largest in Assam, East Bengal, and probably Upper Burma, and was most marked in May.

2nd.—A moderate to considerable excess in the Peninsula. This feature was very slightly marked in March and April but became more prominent with the advance of the season and was strongly shown in May. The excess was, on the whole, most pronounced in the west coast districts, Deccan, Khandesh, Berar and Central India.

The following gives the vertical pressure anomalies as determined from the pressure variations of eight pairs of stations in Northern and Central India :—

Hill and plain Stations.	Vertical pressure anomaly.			Mean of period, March to May 1894.
	March 1894.	April 1894.	May 1894.	
	"	"	"	"
Quetta and Jacobabad .	+·011	+·037	+·042	+·030
Leh and Lahore . .	−·013	+·046	+·082	+·038
Kailang and Lahore .	−·024	+·049	+·088	+·038
Murree and Peshawar .	−·021	0	+·018	−·001
Simla and Ludhiana .	−·022	+·023	+·050	+·017
Darjeeling and Calcutta .	+·006	+·018	+·009	+·011
Mount Abu and Deesa .	−·016	−·007	−·021	−·015
Pachmarhi and Nagpur .	+·004	+·009	+·028	+·014

The vertical pressure anomalies were small in March, but generally negative, and hence in conformity with the usual relation between that feature and the rainfall of the period in Upper India. They were small to moderate in amount, and generally positive in April. They were large in amount and positive in May for all the hill stations in Northern India except Mount Abu.

III. The South-West monsoon period.—The abnormal pressure features of the period varied to some extent from month to month, but they were, on the whole, very feebly marked, although the meteorology of the period in India presented large and striking irregularities and abnormal features. The mean pressure of the Indian area was below the normal for the three months of June, August and September and by almost the same amount as it was in defect during the preceding three months, *viz.*, ·020″. Pressure was, on the other hand, in very slight excess in July, during which four cyclonic storms, of greater intensity and more remarkable features than usually occur in the rains, advanced from the Bay and crossed Northern India in rapid succession.

The following gives data of the mean variation of pressure in India during this period:—

Month.	Mean variation of pressure from normal.			
	Whole of India, Table I.	Whole of India, Table II.	Extra Tropical India, Table II.	Tropical India, Table II.
	″	″	″	″
June	−·022	−·021	−·021	−·022
July	+·006	−·009	−·011	−·004
August	−·022	−·025	−·026	−·025
September . . .	−·018	−·023	−·024	−·024

In the following table are given the anomalies for each month of the period and for the whole period in the eleven meteorological provinces:—

Meteorological Province.	Pressure anomaly.				
	June 1894.	July 1894.	August 1894.	September 1894.	Mean of period.
	″	″	″	″	″
Burma Coast and Bay Islands.	+·005	−·010	−·003	+·003	−·001
Burma Inland . . .	+·006	−·022	−·013	+·002	−·007
Assam	+·009	+·001	+·006	+·019	+·009
Bengal and Orissa . .	+·004	+·001	+·007	+·013	+·006
Gangetic Plain and Chota Nagpur	+·003	+·008	+·001	+·005	+·004
Upper Sub-Himalayas .	0	+·020	−·011	−·002	+·002
Indus Valley and North-West Rajputana	−·011	+·015	−·005	+·001	0
East Rajputana, Central India and Gujarat	−·009	−·001	+·006	−·004	−·002
Deccan	−·003	−·004	+·007	−·008	−·002
West Coast . . .	0	−·011	−·002	0	−·003
South India . . .	+·004	−·009	−·010	−·009	−·006

The anomalies were small but were similar in character throughout the period over the greater part of India. The chief persistent features were—

(1) A slight deficiency in Burma, in July and August.

(2) A slight excess throughout the whole period in Assam, Bengal and the Gangetic Plain.

(3) Irregular variations in the Peninsula and Central India.

The trough of low pressure occupied a more northerly position than usual during three months of this period. In June it was slightly further north than usual, the axis running from Hazaribagh to Cawnpore, and thence to Dera Ismail Khan. Its mean position in July was normal, stretching from Orissa to Sind. It was much further north than usual in August, when the axis was defined by the following stations: Gaya, Lucknow and Mooltan. The western half of the trough was also further north in September, and the mean position of the axis stretched in a north-westerly direction from Orissa to the eastern districts of the North-Western Provinces, and thence through the submontane districts of North-Western India. The position of the monsoon trough of low pressure was directly related throughout the whole period to the distribution of the rainfall and the tracks of the cyclonic storms of the period.

In the following table are given the vertical pressure anomalies in Northern India, as determined by the variation data of six pairs of stations:—

Pair of Stations.	Vertical pressure anomaly in				Mean of period, June to September.
	June 1894.	July 1894.	August 1894.	September 1894.	
	″	″	″	″	″
Leh and Lahore . .	+·018	−·030	−·011	−·003	−·006
Murree and Peshawar .	−·001	−·035	−·011	−·004	−·013
Quetta and Jacobabad .	+·014	−·017	+·018	+·010	+·006
Simla and Ludhiana .	+·002	−·022	−·005	−·004	−·007
Darjeeling and Calcutta .	+·003	0	−·019	−·018	−·008
Mount Abu and Deesa .	−·019	−·032	−·022	−·012	−·022
Mean of month . .	+·003	−·023	−·008	−·005	−·008

They were small in amount and of little significance.

IV. The retreating south-west monsoon period.—The mean pressure of the Indian area was in largish

defect in October and in largish excess in November, and was normal in December. The following gives data :—

Month.	Mean variation of pressure from normal.			
	Whole of India, Table I.	Whole of India, Table II.	Extra Tropical India, Table II.	Tropical India, Table II.
	"	"	"	"
October	—·033	—·036	—·044	—·022
November . . .	+·038	+·031	+·026	+·040
December . . .	+·003	+·002	+·001	+·003
Mean of period . .	+·003	—·001	—·006	+·007

In the following table are given the pressure anomalies or local pressure variations for the eleven meteorological provinces of India for each month of this period and the average variations for the whole period :—

Meteorologic al Province.	Pressure anomaly.			
	October 1894.	November 1894.	December 1894.	Mean of period, October to December 1894.
	"	"	"	"
Burma Coast and Bay Islands . . .	+·033	+·017	+·010	+·020
Burma Inland .	+·021	+·014	+·014	+·016
Assam	—·013	+·006	+·001	—·002
Bengal and Orissa . .	—·004	+·004	+·002	+·001
Gangetic Plain and Chota Nagpur . .	—·016	—·005	—·002	—·008
Upper Sub-Himalayas .	—·016	—·013	0	—·010
Indus Valley and North-West Rajputana .	—·008	—·013	+·001	—·007
East Rajputana, Central India and Gujarat. .	—·006	+·001	—·017	—·007
Deccan . . .	—·004	+·003	—·011	—·004
West Coast . . .	+·020	0	+·005	+·008
South India . . .	+·010	+·001	+·009	+·007

The following gives the chief features of the variations of pressure from the normal, which were very persistent during the period :—

1st.—Considerable local excess of pressure in Burma, greatest in October and decreasing slightly in November and December.

2nd.—Slight but persistent local excess in the West coast districts and Southern India.

3rd.—Slight but persistent local deficiency in North-Western India, including the Punjab, North-Western Provinces, Rajputana and Sind, and less marked at the end than at the beginning of the period.

The most important feature of the pressure distribution of this period was the abnormal local excess in Assam and Burma. The following gives data for representative stations in that area :—

Station.	Pressure anomaly.			
	October 1894.	November 1894.	December 1894.	Mean of period, October to December 1894.
	"	"	"	"
Sibsagar . . .	—·015?	+·001	+·006	—·003?
Silchar	+·013	+·020	+·004	+·012
Bhamo	+·027	0	—·011	+·005
Mandalay . . .	+·013	—·012	—·035?	—·011?
Tavoy	+·033	+·001	—·006	+·009
Mergui	+·037	+·003	—·010	+·010
Rangoon . . .	+·032	+·008	—·004?	+·012?
Diamond Island . .	+·032	+·019	+·011	+·021

It is noteworthy that this feature was also exhibited in the corresponding periods of the years 1892 and 1893.

The following gives mean data for the whole period :—

Division.	Mean Pressure anomaly for the period October to December		
	1894.	1893.	1892.
	"	"	"
Assam	—·002	+·024	—·011
Burma Inland . . .	+·016	+·020	+·011
Burma Coast and Bay Islands .	+·020	+·008	—·004?

Corresponding data for representative stations in these areas are also given for the years 1892 and 1893 for comparison :—

Station.	Pressure anomaly.		
	Mean of period, October to December		
	1894.	1893.	1892.
	"	"	"
Sibsagar	—·003	+·031	—·020
Silchar	+·012	+·020	+·005
Bhamo	+·005	+·006	—·027
Rangoon	+·012?	+·005	—·013
Diamond Island . . .	+·021	+·003	—·003
Tavoy	+·009	—·011	—·022
Mergui	+·010	—·002	—·028

The connection between this local excess of pressure and the early withdrawal of the monsoon from the Bay in each of the three years in question is given in the concluding summary.

The following gives vertical pressure anomalies in North-Western India, as determined from the variation data of seven pairs of stations:—

Pair of stations.	Vertical pressure anomaly in			Mean of period, October to December.
	October 1894.	November 1894.	December 1894.	
	"	"	"	"
Leh and Lahore	+·024	—·021	—·035	—·011
Kailang and Lahore	+·036	?	?	?
Murree and Peshawar	+·016	—·010	—·037	—·010
Quetta and Jacobabad	+·019	—·006	—·024	—·004
Simla and Ludhiana	+·016	—·015	—·035	—·011
Chakrata and Roorkee	+·030	—·003	—·020	+·002
Darjeeling and Calcutta	—·002	—·018	+·005	—·005
Mean of month	+·020	—·012	—·024	—·007

The vertical anomalies were hence positive and moderate in amount in October and were small but negative in November, thus indicating a tendency to the establishment of decreased pressure at the level of the hill stations in Northern India. They were negative in December and large in amount, and hence indicative of more disturbed weather than usual in North-Western India.

Annual.—The mean pressure of the Indian land area for the year 1894 (as obtained from observations at 10 and 16 hours) was ·012″ in defect. The deficiency was slightly greater in Extra Tropical than in Tropical India, and was least in the Deccan and the west coast districts, where it barely averaged ·004.″ The pressure anomalies for the year (*i. e.*, local variations of pressure relative to the general conditions) exceeded ·005″ in the following areas only:—

Area.	Pressure variation from the normal, Table II.	Pressure anomaly.
	"	"
Assam and Cachar	—·018	—·006
Konkan	—·001	+·011
Malabar	—·004	+·008
Deccan	—·004	+·008

The mean pressure of the Indian area was below the normal in eight months and in excess in the remaining four months. The greatest deficiency was in October (—·033″) and the greatest excess in November (+·038″).

The following gives the mean monthly variations of the pressure of the whole of India from the normal as deduced from the mean 8 A.M. monthly values and also from the mean monthly values as obtained from the 10 A.M. and 4 P.M. observations:—

Month.	Variation of mean pressure over whole India from the normal.	
	From 8 A.M. observations.	From 10 A.M. and 4 P.M. observations.
	"	"
January	—·020	—·021
February	+·010	+·010
March	—·017	—·019
April	—·019	—·021
May	—·023	—·026
June	—·022	—·021
July	+·006	+·005
August	—·022	—·025
September	—·018	—·023
October	—·033	—·036
November	+·038	+·031
December	+·003	+·002
Year	—·010	—·012

The following table gives the monthly variations of pressure at four hill stations for comparison with variations of pressure at the level of the plains in India:—

Month.	Variation of mean pressure of month or from normal.				
	Plains of India.	Leh.	Quetta.	Murree.	Simla.
	"	"	"	"	"
January 1894	—·020	—·082	—·020	—·046	—·024
February	+·010	+·064	+·011	+·027	+·040
March	—·017	—·017	+·010	—·036	—·030
April	—·019	+·020	+·005	—·013	—·009
May	—·023	+·018	+·005	—·023	—·008
June	—·022	—·003	—·017	—·029	—·028
July	+·006	+·009	+·013	+·006	+·009
August	—·022	—·053	—·012	—·044	—·041
September	—·018	—·028	—·008	—·029	—·031
October	—·033	—·032	—·019	—·034	—·038
November	+·038	—·002	+·022	+·012	+·009
December	+·003	—·031	—·002	—·025	—·019
Mean of Year 1894.	—·010	—·011	—·001	—·020	—·014

The data of the preceding table indicate that the pressure variations at the hill stations in North-Western India (varying in altitudes from 5,000 to 11,000 feet) were in most months the same in character as at the plains stations and that the mean pressure of the year was in defect at these stations, by almost exactly the same amount as at the plains stations. It may hence be inferred that pressure was in slight defect during the year due to some general cause and that the deficiency was common to the whole depth of atmosphere (up to 11,000 feet at least) as gauged by the meteorological stations in India.

In the following table are given monthly and annual variation data for the stations of Aden, Sibsagar and Colombo for comparison with the corresponding variations of the Indian land area. The comparison indicates that the larger variations of the year were common to the whole Indian monsoon region :—

Month.	Variation of mean pressure of month or period from normal.			
	Indian area.	Aden.	Sibsagar.	Colombo.
January	—·020	—·019	—·029	—·015
February	+·010	—·036	+·010	+·005
March	—·017	+·005	—·046	—·011
April	—·019	+·006	—·035	—·018
May	—·023	—·003	—·067	+·005
June	—·022	—·005	—·019	—·014
July	+·006	—·004	—·002	—·004
August	—·022	—·006	—·022	—·032
September	—·018	—·027	—·003	—·023
October	—·033	—·012	+·048	—·005
November	+·038	—·014	+·039	+·007
December	+·003	—·009	+·009	+·004
Year	—·010	—·010	—·018	—·008

The following table gives the mean variation of pressure in the Indian area from the normal for each year of the period 1875 to 1894 (determined the from 10 and 16 hours observations) :—

Year.	Variation of mean pressure over whole of Indian area from the normal.
	"
1875	—·007
76	—·007
77	+·032
78	+·002
79	—·014
80	—·003
81	+·002
82	—·010
83	—·005
1884	+·010
85	+·014
86	—·003
87	—·006
88	+·011
89	+·004
90	—·009
91	+·010
92	—·002
93	—·001
94	—·012

The following gives a statement of the cyclones and more important cyclonic storms which affected the Indian area during the south-west monsoon of 1894, drawn up in the form adopted in the Annual Reports of the Meteorology of India for the years 1886—90. The tracks of these storms are laid down in Plate VI :—

No.	Month.	Date.	Greatest observed barometric depression.	Character of storm.	Details of storm.
1	April	27th to 30th.	·47"	Cyclonic storm of considerable intensity.	This storm formed in the Andaman Sea to the north-east of Port Blair on the 25th and 26th in front of an early advance of humid south-west monsoon winds. It advanced north-eastwards and crossed the Burma Coast near the mouth of the Rangoon river about 9 A.M. on the 29th. It broke up during the next 24 hours. The strongest winds experienced during the storm were probably of force 10 to 12.
2	June	20th to 29th.	·25"	Cyclonic storm of moderate intensity.	The storm was generated in the north-west angle of the Bay on the 20th and 21st. It marched along the trough of low pressure during the next three days to the eastern districts of the North-Western Provinces, where it remained practically stationary until the 27th, on which day a heavy downpour of rain occurred in the Allahabad and adjacent districts. The storm hence intensified, and began to advance slowly westwards on the 28th into East and Central Rajputana, where it filled up on the 29th and 30th. The storm was chiefly remarkable for the excessive and prolonged rain it gave to the south-eastern districts of the North-Western Provinces and to Bundelkhand. Winds of force 9 to 10 were experienced by the S.S. *Shahzada* on the 22nd.

No.	Month.	Date.	Greatest observed barometric depression.	Character of storm.	Details of storm.
3	June and July.	28th June to 2nd July.	·10″	Cyclonic storm of feeble intensity.	This feeble storm formed in the north-west angle of the Bay on the 28th and 29th June, whilst the previous storm was breaking up in Rajputana. It moved slowly north-westwards across the Balasore coast on the 30th, into Chota Nagpur on the 1st, where it filled up during the day. The strongest winds during its existence did not exceed 7 in force. The course of this storm is not given in the Track Chart (Plate VI).
4	July .	10th to 14th.	·30″	Cyclonic storm of moderate intensity.	The storm was in several respects the most remarkable cyclonic storm of the rains which has occurred during the past ten years. It was generated off the Orissa coast on the 9th and 10th. It intensified rapidly on the 11th and advanced towards the Orissa coast which it crossed near Puri about 3 A.M. of the 12th. It continued to advance in the same direction with an almost uniform velocity of 25 miles per hour across the head of the Peninsula and passed through Lower Sind on the morning of the 14th and broke up during the day against the mountain ranges of Baluchistan. The strongest winds during its existence were of force 9.
5	Do. .	14th to 24th.	·35″	Cyclonic storm of moderate intensity.	This storm formed in the north-west angle of the Bay on the 15th and 16th, whilst the previous storm was breaking up in Baluchistan. It advanced across the Orissa coast near Balasore about noon of the 17th and then marched in a due westerly direction at an average rate of nine miles per hour and was central near Sambalpur on the 18th, Nagpur on the 19th, Pachmarhi on the 20th, Indore on the 21st and Mount Abu on the 22nd. The indraught to it from the Arabian Sea occasioned strong stormy winds on the Cutch and Kathiawar coasts and an excessive cyclonic downpour in Cutch and Kathiawar—actions which originated a small secondary stationary depression on the 23rd in Cutch. The primary depression continued to advance in the same westerly direction and covered Lower Sind on the 24th. Both depressions filled up during the next 24 hours. The most remarkable features of the storm were the unusually strong winds and stormy weather which it gave along the Bombay, Kathiawar and Sind coasts and the excessively heavy and prolonged rainfall in the Central Provinces, South-West Rajputana, Gujarat, Khandesh, Kathiawar, Cutch and Sind. The strongest winds experienced in the Bay of Bengal during its existence were of force 9 and in the Arabian Sea of force 12.
6	July .	23rd to 28th.	·25″	Cyclonic storm of moderate intensity.	This storm formed rapidly on the 22nd and 23rd in the north-west angle of the Bay and South-west Bengal. It was a storm of moderate to considerable intensity on the morning of the 24th, winds of force 10 and 11 being experienced by the light vessels and pilot brigs near the entrance to the Hooghly. The storm centre drifted in a west-north-westerly direction through Chota Nagpur on the 25th and 26th into Bhagelkhand on the 27th. The storm gradually decreased in intensity during its advance across Chota Nagpur, and filled up in Baghelkhand on the 28th.
7	Sept. & Oct.	23rd Sept. to 1st Oct.	·23″	Cyclonic storm of moderate intensity.	The storm originated slowly in the north-west angle of the Bay during the period from the 22nd to the 26th and crossed the coast near Puri about noon of the 27th. It passed into the Central Provinces on the 28th. The centre was between Seoni and Jubbulpore on the morning on the 29th. It had hitherto marched in a west-north-westerly direction, but recurved and advanced in a northerly direction through Baghelkhand on the 30th, and in a north-easterly direction during the next 24 hours into the eastern districts of the North-Western Provinces on the 1st of October and filled up there during the next 24 hours.
8	October .	2nd to 6th.	·30″	Ditto .	This storm formed rather rapidly in the north-west of the Bay on the 1st and 2nd, whilst the previous depression was filling up, and marched in a north-westerly direction to the North-Western Provinces, where it filled up on the 5th and 6th. The storm was remarkable for the heavy burst of rain it gave to the North-Western Provinces during the latter part of its existence.
9	Do. .	20th to 26th.	·23″	Ditto .	This depression was formed in the Arabian Sea off the Malabar and Konkan coasts on the 22nd and 23rd. It marched northwards on the 24th and 25th, and then recurved to north-east and advanced towards the Gulf of Cambay over which it lay on the morning of the 26th. It continued to advance north-eastwards during the day, and broke up in Gujarat during the next 24 hours. The storm was chiefly remarkable for the heavy and prolonged rainfall it gave to Kathiawar, Gujarat, North Bombay, Central India and the eastern districts of the North-Western Provinces.
10	Oct.& Nov.	27th Oct. to 5th Nov.	...	...	The storm formed to the west of the Andamans on the 28th and 29th of October, and marched in a west-north-west direction across the Bay to the Circars coast with a uniform velocity of 8 miles per hour. The centre

No.	Month.	Date.	Greatest observed barometric depression.	Character of storm.	Details of storm.
					crossed the coast on the morning of the 2nd. The storm was partially disintegrated by the obstructive action of the East Ghats and filled up practically during the day. A slight residual depression, however, advanced northwards into the North-Western Provinces on the 5th and disappeared on the 6th and 7th. The storm was remarkable for the unseasonable rainfall it gave to the Gangetic Plain.

The following is a similar statement of the three most important land-formed cyclonic storms generated in the plains of Bengal during the south-west monsoon of 1894.

No.	Month.	Date.	Greatest observed barometric depression.	Character of storm.	Details of storm.
1	June .	12th to 19th.	·24″	Land-formed cyclonic storm of moderate intensity.	This land-formed depression was generated in South-East Bengal on the 12th in front of the first strong and permanent advance of the monsoon winds over the north of the Bay. It advanced in a westerly direction from the 13th to the 17th into Central India and then recurved to north passing through Central Rajputana on the 18th. It was absorbed during the next 24 hours into an area of disturbance existing over the Punjab at that time. The combined action of the two disturbances gave an excessively heavy burst of rain in the submontane districts of the Punjab and over the Punjab and Kashmir hill districts.
2	July . .	3rd to 11th.	·16″	Land-formed depression of feeble intensity.	This storm originated in Central Bengal on the 3rd during a heavy local burst of rain. It marched westwards during the next 48 hours, and the centre was near Cawnpore on the 5th. It was practically stationary until the 8th, when it intensified slightly and resumed its westerly march. The centre was near Ajmere on the 9th and crossed the Sind frontier on the 10th, and was near Kurrachee on the 11th. It broke up during the day under the action of the Baluchistan mountains. The storm was remarkable for the heavy burst of rain it gave during its later stages to Rajputana and Sind.
3	August .	13th to 20th.	·18″	Land-formed storm of feeble intensity.	This depression formed in Bengal on the 12th and 13th at the eastern extremity of the trough of low pressure and marched slowly westwards until the 20th when it was absorbed in the permanent low pressure area in Sind and North-West Rajputana. The storm, although feeble, was remarkably persistent.

Winds.

The mean direction of the wind and the mean diurnal movement of the air, as measured by Robinson anemometers, are given for every station in Table II in each monthly review. The normal values are also given for the sake of ready comparison. The normal data of these elements will be found in a collected form in Tables XX and XXI of the Annual Report for 1890. The mean 8 A.M. wind directions for each month are laid down in the first chart in each monthly review. They are calculated in the usual manner from the 8 A.M. wind data given in Table I in each monthly review. As a general rule, the mean 8 A.M. wind directions vary little from the mean wind directions (calculated from the 10 and 16 hours wind data) in Table II of each monthly review, but in some cases and at certain seasons of the year they differ very considerably.

The chief features of the air movement over India in 1894, have been described in the monthly reviews of the year. The following gives a summary of the most important features :—

I. The cold weather period.—This period was more disturbed than usual, as a large number of cold weather storms crossed Northern India from west to east. As these disturbances chiefly influence the winds at the hill stations, the air movement of the period was considerably above the normal at these stations. The following table gives data in illustration :—

Station.	Mean daily air movement in miles during cold weather period.			
	Mean actual.	Mean normal.	Variation from normal.	Percentage variation.
Murree	319	197	+122	+62
Chakrata	165	120	+ 45	+38
Ranikhet	39	48	− 9	−19
Darjeeling	132	92	+ 40	+44
Mount Abu	153	122	+ 31	+25
Fachmarhi	83	83	0	0

Winds were, on the whole, slightly stronger than usual in the Gangetic Plain; but the only important feature was the increased northing of the winds, apparently indicating a larger flow than usual from the Himalayas and probably also a diminished flow from the Baluchistan plateau. The following gives data for four representative stations:—

Station.	Mean wind direction.			Mean wind direction.		
	Actual, January 1894.	Normal, January.	Increased northing.	Actual, February 1894.	Normal, February.	Increased northing.
			°			
Agra . .	N 34° W	N 64° W	+30	N 29° W	N 75° W	+46
Allahabad .	N 36° W	N 34° W	− 2	N 60° W	N 66° W	+ 6
Patna . .	N 75° W	N 83° W	+ 8	N 57° W	N 79° W	+22
Hazaribagh .	N 38° W	N 62° W	+24	N 31° W	N 68° W	+37

The same northerly deflection was very strongly shown in Bengal in January and to a less extent in Rajputana and Central India. The following gives data of three Bengal stations for January:—

Station.	Mean wind direction.		
	Actual, January 1894.	Normal, January.	Increased northing.
	°	°	°
Hazaribagh . . .	N 38 W	N 62 W	+24
Burdwan	N 16 W	N 32 W	+16
Calcutta	N 12 W	N 38 W	+26

In consequence of the large number of disturbances during the period winds were generally stronger in Northern and Central India and somewhat more steady than usual. The following gives mean data illustrating these features:—

District.	Steadiness during cold weather period.			Air movement in miles during cold weather period.		
	Mean actual percentage.	Normal percentage.	Variation from normal.	Mean actual.	Mean normal.	Percentage variation.
Chota Nagpur .	57	57	0	185	137	+35
Bihar . .	52	47	+5	83	67	+24
North-Western Provinces .	34	34	0	61	60	+ 2
Sind . .	29	29	0	104	156	−32
Punjab . .	31	22	+9	43	50	−14
Rajputana .	34	25	+9	118	121	− 2
Central India	34	30	+4	82	72	+ 14

Winds were very light and irregular in the Central Provinces, Berar and the Deccan in January. They were more southerly than usual in February; but the variation from the mean were very irregular from station to stations. North-west winds continued longer than usual in Bengal, and held steadily until the end of February on the Bengal and Orissa coasts.

II. The hot weather period.—March 1894 was slightly more disturbed than usual. The pressure and temperature conditions and the weather generally in April were very approximately normal. The first advance of strong humid winds to Tenasserim and Burma occurred much earlier than usual in the last week of April, and light to moderate south-west winds held steadily in May over that area. The hot weather conditions in May were more intensely marked than usual in the Gangetic plain, the Central Provinces and the North Deccan. The chief feature of the last fortnight of May was the prevalence of very strong westerly hot day winds in the Gangetic plain, West Bengal and Chota Nagpur, accompanying abnormally high temperature conditions in Bihar, Chota Nagpur and West Bengal.

The air movement in India in March and April hence differed to no large extent from the normal. Winds were slightly steadier and stronger in Burma, and the Gangetic Plain and were very unsteady in Sind, Madras and the Bombay Deccan. They were very unsteady in Burma in April and also in Sind, and were generally somewhat stronger and steadier than usual in the Gangetic Plain and Bengal. They were also steadier in the Deccan and Central Provinces and more directly from west than usual. The following table gives comparative data of the strength and steadiness of the mean air movement in different provinces for the months of March and April 1894:—

Province.	Mean wind velocity in miles per diem.		Wind steadiness.	
	Mean actual, March and April 1894.	Mean normal, March and April.	Mean actual, March and April 1894.	Mean normal March and April.
Burma . . .	148	132	49	57
Bengal	162	170	56	49
Bihar	127	111	44	28
Chota Nagpur . . .	224	190	44	55
North-Western Provinces .	72	77	45	36
Punjab	61	69	27	24
Sind	140	177	21	41
Rajputana . .	141	154	58	42
Central India	101	107	57	46
Central Provinces . .	105	101	31	31

The chief features of the air movement in May differed considerably from those of the preceding two months, and are hence given below :—

(1) Winds were slightly weaker but steadier than usual at Port Blair and in Burma, probably due to the prevailing low temperature in that area during the month. The following gives mean data :—

District.	Mean wind velocity in miles per diem.		Wind steadiness.	
	Mean actual, May 1894.	Mean normal, May.	Mean actual, May 1894.	Mean normal, May.
Port Blair . . .	154	166	71	48
Burma (coast) . . .	104	141	62	52
Arakan	?	88	26	31

(2) Winds were stronger and steadier than usual in Bengal and the Gangetic Plain and much more directly from the west in the interior than usual, more especially in West and Central Bengal. The following data show the increased strength and steadiness of the winds in that area :—

Province.	Mean wind velocity in miles per diem.		Wind steadiness.	
	Mean actual, May 1894.	Mean normal, May.	Mean actual, May 1894.	Mean normal, May.
Bengal	250	184	64	54
Chota Nagpur . .	262	210	32	15
Bihar	167	132	46	49
North-Western Provinces.	111	90	42	17

(3) Winds were much stronger than the normal in Rajputana, Central India, Kathiawar, Gujarat, Berar and the Central Provinces and were more directly from the west than usual on the mean of the month over the greater part of that area, as in the Gangetic Plain. The following gives data illustrating the increased strength and steadiness of the winds in these areas :—

Province.	Wind velocity in miles per diem.		Wind steadiness.	
	Mean actual, May 1894.	Mean normal, May.	Mean actual, May 1894.	Mean normal, May.
Rajputana . . .	282	220	89	63
Central India . . .	203	140	82	48
Berar	308	208	83	62
Central Provinces . .	187	148	72	52

(4) Winds were slightly weaker in the Punjab and the Bombay and Madras coast districts and were normal in the South Deccan. The variations from the normal conditions were however small and apparently unimportant, except so far as they showed a marked contrast to those obtaining in Northern and Central India.

The preceding hence suggests that the air movement in Northern and Central India in May was the ordinary hot weather circulation considerably strengthened and slightly modified in direction by the low pressure conditions which prevailed throughout nearly the whole month in North Bihar, North Bengal and Assam and probably over the Eastern Himalayan area.

III. The south-west monsoon period.—The south-west monsoon current was established in the north of the Bay about the normal date (*i.e.*, in the second week of June). The Arabian Sea current was slightly delayed and was not established on the Malabar coast until the 6th or 7th of June. It advanced with great rapidity northwards and into the interior, giving the first heavy rainfall in the Central Provinces and Central India on the 10th and in Upper India from the 11th to the 14th. The permanent advance in the Arabian Sea was effected more quietly than usual, and no cyclonic storm appears to have formed in any part of that area during the period of the advance. A cyclonic storm of moderate intensity formed in front of the advancing current in the north of the Bay. It marched by a curved path to Rajputana and the East Punjab, and established during its progress south-west monsoon conditions over the whole of Northern India.

The most noteworthy feature of the lower air movement of the south-west monsoon circulation in India was that the Bay current was considerably above its normal strength and the Bombay current slightly weaker than usual. This is shown by the following comparative data derived for each current from the anemometer returns of four coast and four inland stations, where the exposure of the wind instruments is most satisfactory and the observations are trustworthy :—

Month.	Bay of Bengal current. Percentage variation of mean air movement from the normal at		Bombay current. Percentage variation of mean air movement from the normal at	
	Four coast stations.	Four inland stations.	Four coast stations.	Four inland stations.
June	− 2	+ 3	−14	+6
July	+21	+24	− 9	−3
August	+18	− 5	− 5	0
September . . .	+22	+ 6	−16	−1
Mean of period . .	+15	+ 7	−11	+1

Corresponding data are given showing the increased steadiness of the air movement during the greater part of the period :—

Month.	Bay of Bengal current. Variation of mean steadiness percentage from the normal.		Bombay current. Variation of mean steadiness percentage from the normal.	
	Coast stations.	Inland stations.	Coast stations.	Inland stations.
June	+ 4	− 2	+ 2	+ 6
July	− 4	−13	+ 4	+ 1
August	+12	+ 9	+12	+10
September	+12	+12	+13	+ 8

The following gives comparative data for the air movement in the Arabian Sea and Bay of Bengal so far as is indicated by the data collected from ships entering the ports of Calcutta and Bombay :—

Month.	Mean daily force of wind (Beufort notation) in the Bay of Bengal.			Arabian Sea.		
	Actual.	Normal.	Variation from normal.	Actual.	Normal.	Variation from normal.
June	4·1	4·0	+0·1	4·1	4·5	−0·4
July	4·1	4·0	+0·1	4·3	4·6	−0·3
August	3·5	4·0	−0·5	3·7	4·3	−0·6
September	3·7	3·7	0	3·6	3·5	+0·1

The increased strength of the winds in the area dominated by the Bay current is shown clearly by the following comparative data giving the percentage variation of the winds from their normal strength in the larger divisions of the Empire :—

Division.	Percentage variation.				
	June 1894.	July 1894.	August 1894.	September 1894.	Mean of period.
Bengal	+ 1	+ 7	+ 1	+2	+ 3
Bihar	+42	+36	+14	+42	+34
Chota Nagpur	+ 8	+28	− 3	+6	+10
North-Western Provinces and Oudh.	+14	−11	− 7	+8	+ 1
Punjab	− 5	−28	−4	−4	−10
Rajputana	−16	−10	+10	−16	− 8
Central India	+13	+11	−3	−10	+ 3
Central Provinces	+11	+ 3	−4	−13	− 1
Bombay coast	− 7	− 5	− 5	−19	− 9
Deccan	+15	+ 5	0	+10	+ 8

The following gives briefly the more important variations in the direction of the lower air current in India during this period :—

June.—(*a*)—Winds were more easterly than usual in Bengal, Chota Nagpur and Bihar.

(*b*)—Winds were slightly more southerly in Central India and the Central Provinces.

(*c*)—The area of most variable winds (and hence the trough of low pressure) was somewhat further north than usual, and was defined by the following stations:—Hazaribagh, Allahabad, Agra, Roorkee and Lahore.

July (*a*)—Winds were very unsteady and more easterly than usual in North Eastern India, more especially in East Bengal and Assam.

(*b*)—Winds were more westerly than usual on the Burma coast and at Port Blair.

(*c*)—The area of most unsteady winds was defined by the following stations :—Burdwan, Hazaribagh, Allahabad, Agra and Mooltan.

(*d*)—Winds were stronger than usual at the hill stations in Upper India.

August (*a*)—The Bay current was steadier than usual and of normal strength.

(*b*)—Winds were steadier but weaker than usual in the North-Western Provinces.

(*c*)—The Arabian Sea current was much stronger and steadier than usual during the first three weeks of the month but was weak and unsteady during the last week.

(*d*)—The area of most variable winds (and of lowest pressure) was further north than usual, and occupied nearly the same position as in June. It stretched from Hazaribagh through Allahabad and Agra to Lahore

(*e*)—Winds were stronger than usual at the hill stations in Upper and Central India.

September (*a*)—The Bay current was stronger and steadier than usual.

(*b*)—Winds were more westerly than usual in Burma and at Port Blair.

(*c*)—Winds were more southerly and less easterly than usual in the interior of Bengal.

(*d*)—The axis of the trough of low pressure and area of variable winds stretched from Orissa (Cuttack) through Hazaribagh, Allahabad and Meerut to Lahore and Ludhiana, and was hence further north than usual at the western extremity.

(*e*)—The Arabian Sea current was steadier than usual, and winds were remarkably steady in Rajputana, Central India and the Deccan throughout the month and were more westerly than usual.

The preceding give all the more important features of the south-west monsoon air circulation. They may be summed up as follows:—

(1) The Bay current was stronger and steadier than usual on the mean of the whole period.

(2) It was directed in the south of the Bay to a greater extent than usual towards Tenasserim and Lower Burma, more especially in June and August.

(3) It was determined in the first half of the period far more largely than usual up the Gangetic Plain and away from Assam and North and East Bengal. Its extension was, on the other hand, practically normal in Northern India in August and September.

(4) The Bombay current was on the whole, slightly weaker but steadier than usual.

(5) In its extension over the Peninsula and Central and North-Western India it advanced slightly more towards the north than usual. This was very marked in June and July.

(6) Winds were stronger throughout the whole season at the hill stations in Upper and Central India.

IV. The retreating south-west monsoon period.—The south-west monsoon withdrew from Upper India in the last week of September and hence about the normal period. Pressure increased less rapidly than usual in the Baluchistan area and Upper India in October, and a remarkable feature of that month and the first week of November was the advance of all the cyclonic storms of that period to the eastern districts of the Gangetic Plain. After the disappearance of the third and last of these cyclonic disturbances pressure increased generally in Northern India, and fine clear weather set in. Pressure also increased rapidly at that time in Burma, and unusually cool dry weather, with strong northerly winds, was also established in that area in November.

These high pressure conditions extended south-westwards across the Bay in the third and fourth weeks of November and thus determined the final retreat of the south-west monsoon from the Bay in the last week of November and upwards of a fortnight earlier than usual.

The following gives the chief features of the air movement during this period, in which the south-west monsoon retreated from the whole Indian area:—

(1) Winds in October were stronger and more easterly in the south-east of the Bay, and were weaker than usual and irregular in direction in the Coromandal coast districts.

(2) Southerly winds prevailed during October to an unusual extent in Bengal and very light unsteady winds in the Gangetic Plain and light north-westerly airs in the Punjab and Rajputana.

(3) Abnormal north-westerly winds obtained in the Central Provinces and the Deccan, where, as a rule, winds are north-easterly in October.

These features hence indicated the more frequent and larger extension of the Bay current into North-Eastern India than usual in October and also the abnormal delay in the establishment of westerly land winds in the Gangetic Plain.

The conditions prevailing in October lasted until the end of the first week of November, when the ordinary cold weather air movement was established in Northern India, and stronger northerly winds than usual set in over Burma. The mean air movement of the month of November hence represents the conditions prevailing during the last three weeks of the month. The only important abnormal features were—

(1) Winds were more easterly than usual in the east of the Bay.

(2) Winds were less easterly than usual in the Central Provinces and Deccan.

The meteorological conditions in December were more abnormal than those of the preceding two months. North-east monsoon winds prevailed steadily throughout the month in the Bay, and were occasionally of considerable strength in the south-west during which period light to moderate showers fell in the South Coromandel coast districts and South Madras. On the other hand weather was more disturbed than usual in Upper India, and a series of very feeble depressions, which affected Baluchistan, Sind, and the Punjab chiefly, gave unusually early and heavy precipitation, more especially in the Punjab and Kashmir Himalayas.

The air movement in India during the month of December was marked by the following abnormal features:—

1st.—Winds were steadier and stronger in Burma and at Port Blair, and were more easterly than usual.

2nd.—Winds were more easterly or less westerly than usual in Bengal and Orissa.

3rd.—Winds were very light and unsteady in the Gangetic Plain, and were less westerly or more northerly than usual.

4th.—Winds were more northerly and less westerly than usual in Rajputana and Central India.

5th.—Winds were unusually unsteady in the Central Provinces and North Daccan, but were on the whole stronger than usual.

Humidity.

The four following monthly tables (Tables XI to XIV) give variation data of aqueous pressure and relative humidity :—

1st.—For the eighteen meteorological areas adopted in the geographical summaries of meteorological data in the annual reports issued by the Department previous to 1891.

2nd.—For the ten meteorological provinces of the Empire.

TABLE XI.—*Geographical Summary of the aqueous vapour pressure data of Table II in the monthly weather reviews of 1894.*

METEOROLOGICAL AREA.	Number of stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		"	"	"	"	"	"	"	"	"	"	"	"	"
North-West Himalaya	7	+·066	+·008	−·013	−·007	−·015	+·062	+·035	+·007	+·035	+·025	+·018	+·002	+·019
Sikkim Himalaya, and Nepal.	2	−·015	+·036	−·011	+·005	+·018	+·018	−·006	+·005	+·010	+·060	−·001	−·003	+·010
Punjab plains . .	4	+.024	+·060	+·003	+·017	+·021	+·056	+·074	+·024	+·023	−·041	−·012	+·015	+·022
Gangetic plain . .	7—8	+·026	+·105	−·027	−·023	−·047	+·068	−·010	+·004	+·034	+·103	+·080	+·059	+·031
Western Rajputana .	2—3	+·032	+·059	−·047	−·014	−·027	+·043	+·029	0	+·022	−·030	+·013	−·059	+·002
Eastern Rajputana and Central India.	3—4	+·060	+·099	−·009	−·022	−·003	+·076	+·019	+·007	+·072	+·074	+·065	+·092	+·044
Nerbudda Valley .	2—3	+·024	+·065	+·014	−·012	−·003	+·049	+·009	+·006	+·053	+·111	+·054	+·097	+·039
Chota Nagpur .	1	+·025	+·083	−·042	+·012	− 067	+·031	−·057	−·037	−·015	+·098	+·045	+·063	+·012
Lower Bengal . .	5	−·026	+·040	−·087	−·017	+·002	−·019	−·039	−·029	−·013	+·033	+·007	+·027	−·010
Assam and Cachar .	3	−·011	+·080	+·001	+·013	+·002	+·019	−·004	−·007	−·005	+·047	+·015	+·015	+·014
Orissa . . .	2	−·012	+·026	+·012	−·015	+·029	−·004	−·030	−·017	+·004	+·042	+·009	+·023	+·006
Central Provinces, (South) and Berar.	5	+·021	+·035	−·011	+·008	−·030	+·039	−·008	−·011	+·034	+·075	+·004	+·050	+·017
Konkan . . .	2—3	−·006	+·026	−·010	+·021	−·002	+·024	−·005	−·001	−·007	+·018	−·051	+·006	+·001
Malabar coast . .	1	−·041	−·017	+·018	−·019	−·012	+·002	−·009	0	+·011	0	−·027	−·031	−·010
Deccan, Hyderabad and Mysore.	5	+·025	+·048	+·031	+·013	−·016	−·013	−·018	−·006	−·018	+·019	−·035	−·012	+·002
East coast and Carnatic.	4	−·016	+·012	+·007	−·021	−·023	−·027	−·029	+·006	−·010	−·002	+·004	+·006	−·008
Arakan and Pegu .	4	−·021	+·069	+·035	−·011	+·020	+·026	+·004	+·005	+·016	−·001	−·054	−·023	+·005
Bay Islands . .	1	−·033	+·039	+·003	−·008	−·022	+·006	+·013	+·018	+·011	+·006	−·119	−·035	−·010
Extra Tropical India .	39—40	+·025	+·063	−·023	−·009	−·013	+·045	+·009	+·001	+·026	+·047	+·032	+·031	+·020
Tropical India . .	24—25	−·001	+·036	+·012	−·001	−·009	+·002	−·012	−·002	+·005	+·024	−·025	+·005	+·003
Whole India . .	63—65	+·015	+·052	−·009	−·006	−·011	+·031	+·001	−·001	+·018	+·038	+·010	+·021	+·013

TABLE XII.—*Geographical Summary of the humidity data of Table II in the monthly weather reviews of 1894.*

METEOROLOGICAL AREA.	Number of stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
North-West Himalaya	7	+9	+5	+1	−1	−6	+10	+7	+2	+5	+4	+11	+13	+5
Sikkim Himalaya, and Nepal.	2	−2	+4	−1	+1	−4	0	+1	+3	+1	+10	+2	+1	+1
Punjab Plains . .	4	+10	+10	+5	+1	−3	+6	+11	+3	+4	−5	−1	+6	+4
Gangetic Plain . .	7–8	+3	+12	0	−1	−7	+8	0	+5	+4	+10	+10	+8	+4
Western Rajputana .	2–3	+9	+10	−3	−2	−1	+5	+7	+1	+1	−2	−2	−10	+1
Eastern Rajputana and Central India.	3–4	+9	+12	+1	−2	−3	+12	+5	+2	+6	+8	+9	+15	+6
Nerbudda Valley .	2–3	+2	+1	+2	−1	−2	+10	+4	+2	+6	+12	+11	+10	+5
Chota Nagpur . .	1	+1	+8	−6	0	−10	+4	−4	−2	−2	+9	+5	+4	+1
Lower Bengal . .	5	−6	−1	−10	−3	−5	0	0	0	−1	+1	+2	+1	−2
Assam and Cachar .	3	−2	+4	+1	−2	+1	0	−1	+1	+3	+5	+3	+2	+1
Orissa . . .	2	−5	−2	−5	−5	−5	+1	−1	−1	−2	+2	+1	−1	−2
Central Provinces, (South) and Berar.	5	+1	+1	+2	0	−3	+5	0	−1	+5	+9	+4	+4	+2
Konkan . . .	2–3	−2	−1	−3	+1	−1	+1	+1	−2	+1	+2	−5	+1	−1
Malabar Coast . .	1	−6	−2	−1	−2	−4	−3	−2	0	−1	−1	−4	−6	−3
Deccan, Hyderabad and Mysore.	5	+6	+7	+6	+5	+1	−2	−1	−1	0	+4	+1	−1	+2
East Coast and Carnatic.	4	−1	+2	+1	0	−5	−5	−5	+1	−1	−2	0	−1	−1
Arakan and Pegu .	4	−1	+3	+2	−2	+6	+2	+1	+1	−1	+1	−3	−1	+1
Bay Islands . .	1	−2	0	−1	0	+1	0	0	+2	+2	0	−8	−5	−1
Extra Tropical India .	39–40	+4	+7	−1	−1	−4	+6	+3	+2	+3	+5	+6	+6	+3
Tropical India . .	24–25	0	+2	+1	0	−1	0	−1	0	+1	+3	−1	0	0
Whole India . .	63–65	+2	+5	0	−1	−3	+4	+2	+1	+2	+4	+3	+4	+2

TABLE XIII.—*Variation of the mean monthly aqueous vapour pressure in ten meteorological provinces of India in 1894*

METEOROLOGICAL PROVINCE.	MEAN VARIATION OF AQUEOUS VAPOUR PRESSURE FROM NORMAL IN												Year 1894.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
	"	"	"	"	"	"	"	"	"	"	"	"	
Burma Coast and Bay Islands .	−·030	+·058	+·015	−·016	+·004	+·007	+·007	+·009	+·014	−·003	−·077	−·040	−·004
Assam	−·011	+·080	+·001	+·013	+·002	+·019	−·004	−·007	−·005	+·047	+·009	+·015	+·013
Bengal and Orissa . . .	−·019	+·042	−·041	−·013	+·014	−·003	−·032	−·022	−·001	+·033	+·004	+·027	−·001
Gangetic Plain and Chota Nagpur.	+·020	+·112	−·039	−·015	−·051	+·041	−·034	−·009	+·027	+·110	+·079	+·054	+·025
Upper Sub-Himalayas . .	+·041	+·083	+·006	−·017	−·013	+·123	+·050	+·029	+·019	+·008	+·055	+·053	+·036
Indus Valley and North-West Rajputana.	+·015	+·050	−·033	+·024	+·001	+·014	+·044	+·009	+·020	−·049	0	−·059	+·003
East Rajputana, Central India, and Gujarat.	+·050	+·074	−·025	−·039	−·027	+·069	+·018	+·001	+·065	+·042	+·028	+·074	+·028
Deccan	+·023	+·054	+·019	0	−·010	+·043	+·002	+·001	+·037	+·087	+·026	+·063	+·029
West Coast	−·015	+·011	−·001	+·011	−·005	+·019	+·002	−·001	−·003	+·016	−·045	−·003	−·001
South India	+·011	+·043	+·031	+·001	−·018	−·026	−·029	0	−·015	−·005	−·003	−·008	−·001

TABLE XIV.—*Variation of the mean monthly humidity from the normal in ten meteorological provinces of India in 1894.*

Meteorological Province.	Mean variation of humidity from normal in												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year 1894.
Burma Coast and Bay Islands .	— 4	+ 2	—1	—2	+6	+ 1	+ 1	+1	+1	0	—6	— 4	0
Assam	— 2	+ 4	+1	—2	+1	0	— 1	+1	+3	+ 5	+3	+ 2	+1
Bengal and Orissa . . .	— 5	— 1	—6	—3	—4	0	0	0	—2	+ 1	+1	+ 1	—2
Gangetic Plain and Chota Nagpur.	0	+13	—2	0	—7	+ 5	— 2	+3	+3	+12	+9	+ 4	+3
Upper Sub-Himalayas . .	+11	+14	+6	—2	—5	+13	+10	+6	+5	+ 1	+9	+14	+7
Indus Valley and North-West Rajputana.	+ 7	+ 8	—1	—1	—3	— 1	+ 6	0	+1	— 6	—5	—11	—1
East Rajputana, Central India and Gujarat.	+ 9	+10	0	—3	—3	+11	+ 6	+2	+6	+ 5	+4	+12	+5
Deccan	+ 2	+ 4	+2	+1	—2	+ 6	+ 2	+1	+5	+10	+7	+ 7	+4
West Coast	— 3	— 1	—2	0	—2	0	0	—1	0	+ 2	—5	— 1	—1
South India	+ 2	+ 5	+4	+3	—2	— 4	— 5	0	—2	— 1	+1	— 3	0

I. The Cold weather period.—The following is a statement of the more prominent features of the humidity conditions of the period :—

(1) The absolute and relative humidities were in marked excess over nearly the whole of North-Western and Central India, including Bihar, Chota Nagpur, the North-Western Provinces, the Punjab, Rajputana, Central India, and the northern districts of the Central Provinces. The following gives comparative data in illustration :—

Division.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	January 1894.	February 1894.	Cold weather period, 1894.	January 1894.	February 1894.	Cold weather period, 1894.
	"	"	"			
Bihar	+·012	+·108	+·060	— 1	+10	+ 5
Chota-Nagpur . . .	+·025	+·083	+·054	+ 1	+ 8	+ 5
North-Western Provinces and Oudh.	+·030	+·089	+·060	+ 4	+12	+ 8
Punjab	+·024	+·060	+·042	+10	+10	+10
Rajputana	+·045	+·056	+·051	+ 9	+ 7	+ 8
Sind	+·031	+·076	+·054	+ 9	+14	+12
Central India . . .	+·072	+·135	+·104	+12	+17	+15
Berar	+·023	+·033	+·028	+ 1	+ 1	+ 1
Central Provinces . . .	+·029	+·071	+·050	+ 2	+ 3	+ 3

The amount of aqueous vapour in the air was from 20 to 50 per cent. greater than the normal, and was most largely in excess in Central India, South Bihar and the eastern districts of the North-Western Provinces. The relative humidity was largely in excess, as the temperature was considerably below the normal in the area of increased absolute humidity. The mean excess for the whole period was greatest at Lahore (16 above the normal), Ludhiana (14 above), Nowgong (14 above) and Sutna (12 above), and hence in the South-East Punjab, Bundelkhand and Baghelkhand.

(2) The amount of aqueous vapour present in the air was almost as largely in excess, relatively to the normal conditions, at the hill stations in North-Western and Central India as in the adjacent plain districts. As the temperature was lower than usual at these stations, the mean humidity percentage was in moderately large excess, *e.g.* :—

Station.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	January 1894.	February 1894.	Mean cold weather period, 1894.	January 1894.	February 1894.	Mean cold weather period, 1894.
	"	"	"			
Quetta	+·007	+·039	+·023	+ 15	+10	+13
Leh	+·004	—·001	+·002	+ 7	+ 5	+ 6
Murree	+·015	+·015	+·015	+ 21	+ 4	+13
Simla	—·010	+·016	+·003	+ 3	+ 6	+ 5
Ranikhet	+·015	+·051	+·033	+ 8	+11	+10
Mount Abu	+·053	+·074	+·064	+ 13	+10	+12
Pachmarhi	+·023	+·057	+·040	+ 1	+ 2	+ 2

(3) The air was slightly drier than usual in Burma, Orissa, Bengal and Assam in January; but the absolute humidity increased considerably in February and was in moderate excess, and hence on the mean of the period the air contained slightly more moisture than usual. The following gives data:—

Province or Area.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	January 1894.	February 1894.	Mean cold weather period, 1894.	January 1894.	February 1894.	Mean cold weather period, 1894.
	"	"	"			
Port Blair	−·038	+·039	−·001	−2	0	−1
Burma	−·027	+·065	+·019	−5	+2	−2
Bengal	−·022	+·047	+·013	−5	0	−3
Orissa	−·012	+·026	+·007	−5	−2	−4
Assam	−·011	+·080	+·035	−2	+4	+1

(4) The air was somewhat less humid than usual in the west coast districts due to the frequent extension of dry northerly winds along that coast after the larger disturbances and cold weather storms of the period. The following gives comparative data for four stations in that area:—

Station.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	January 1894.	February 1894.	Mean cold weather period, 1894.	January 1894.	February 1894.	Mean cold weather period, 1894.
	"	"	"			
Bombay	+·004	+·016	+·010	−3	−2	−3
Ratnagiri	−·001	+·035	+·017	0	0	0
Karwar	−·022	?	?	−4	?	?
Cochin	−·041	−·017	−·029	−6	−2	−4

(5) There was a slight to moderate excess of aqueous vapour in the Deccan, North and Central Madras, and a slight deficiency in the southern districts of Madras.

The following data for four stations illustrate the conditions which obtained in these areas:—

Station.	Variation of mean absolute humidity from normal in			Variation of mean relative humidity from normal in		
	January 1894.	February 1894.	Mean cold weather period, 1894.	January 1894.	February 1894.	Mean cold weather period, 1894.
	"	"	"			
Sholapur	+·026	+·014	+·020	+3	0	+2
Madras	+·055	+·074	+·065	+6	+6	+6
Bangalore	+·010	+·020	+·015	−1	+3	+1
Trichinopoly . . .	−·057	−·029	−·043	−7	−5	−6

The humidity conditions of this period were very similar to those which prevailed in the corresponding period of the preceding year 1893. The most noteworthy feature was the excessive humidity over the whole of North-Western and Central India, Bihar and Chota Nagpur.

II.—The hot weather period.—This period was even drier than usual over nearly the whole of India. The chief exception was Burma where the showery weather usually antecedent to the rains proper commenced earlier than usual in the last week of April.

The following gives a summary of the more important humidity conditions of India during this period:—

1st.—The air was somewhat less humid than usual in Burma and Arakan during March and April and more humid in May and on the mean of the whole period the relative humidity was in slight excess, as is shown by the following:—

Station.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	March 1894.	April 1894.	May 1894.	Hot weather period 1894.	March 1894.	April 1894.	May 1894.	Hot weather period 1894.
	"	"	"	"				
Rangoon .	+·010	−·065	+·013	−·014	−1	−5	+8	+1
Diamond Island	+·010	−·025	−·030	−·015	−1	−2	+7	+1
Akyab . .	+·036	+·033	+·053	+·041	−1	0	+6	+2

2nd.—The humidity conditions were normal in Assam during the whole period. The air was much drier over the whole of Bengal in March and in West Bengal, Chota Nagpur and Bihar in May.

The following gives comparative data for these areas :—

Province.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	March 1894.	April 1894.	May 1894.	Hot weather period, 1894.	March 1894.	April 1894.	May 1894.	Hot weather period, 1894.
	"	"	"	"				
Bengal . .	−·059	−·012	+·009	−·021	−7	−2	−4	−4
Bihar . .	−·070	−·004	−·022	−·035	−6	+1	−5	−3
Chota Nagpur .	−·042	+·012	−·067	−·032	−6	0	−10	−5
Orissa . .	+·012	−·015	+·029	+·009	−5	−5	−5	−5

The conditions are shown even more clearly by the data of the following stations :—

Station.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	March 1894.	April 1894.	May 1894.	Hot weather period 1894.	March 1894.	April 1894.	May 1894.	Hot weather period 1894.
	"	"	"	"				
Burdwan .	−·116	+·021	−·012	−·036	−11	+4	− 6	−4
Hazaribagh .	−·042	+ 012	−·067	−·032	− 6	0	−10	−5
Berhampur .	−·112	+·017	−·002	−·032	−14	− 4	− 9	−9
Patna . .	−·088	−·013	−·082	−·061	− 9	−1	−12	−7

3rd.—The amount of aqueous vapour present in the air and the relative humidity were both below the normal to a moderate extent in the North Western Provinces, Rajputana, Central India and Sind, as is shown by the following comparative data :—

Province.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	March 1894.	April 1894.	May 1894.	Hot weather period 1894.	March 1894.	April 1894.	May 1894.	Hot weather period 1894.
N.-W. Provinces	−·013	−·030	−·052	−·032	+2	−2	−7	−2
Rajputana .	−·024	−·025	−·024	−·024	0	−3	0	−1
Central India .	−·063	−·028	−·004	−·032	−6	−1	−5	−4
Sind . .	+·004	+·001	−·008	−·001	+2	−4	−3	−2

4th.—The relative as well as the absolute humidity were in moderate excess in the Punjab and Baluchistan.

5th.—The most noteworthy feature at the hill stations in the Western Himalaya was the increased humidity at the high stations of Leh and Kailang due in part to excess of aqueous vapour and in part to decreased temperature :—

Station.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	March 1894.	April 1894.	May 1894.	Hot weather period, 1894.	March 1894.	April 1894.	May 1894.	Hot weather period, 1894.
	"	"	"	"				
Leh . .	−·009	+·009	+·006	+·002	+3	+6	+2	+4
Kailang . .	−·010	−·022	+·008	−·011	0	+2	+5	+2

6th.—The humidity conditions in the Deccan and the Madras and Bombay districts differed to no important extent from the normal. The chief feature was a moderate excess of vapour in the Deccan and Mysore. The following data for three stations illustrate it :—

Station.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	March 1894.	April 1894.	May 1894.	Hot weather period, 1894.	March 1894.	April 1894.	May 1894.	Hot weather period, 1894.
	"	"	"	"				
Bellary . .	+·046	+·053	−·035	+·021	+5	+7	0	+4
Sholapur . .	−·004	+·030	−·011	+·005	−2	+4	0	+1
Bangalore .	+·023	+·021	+·01	+·020	+2	+6	+3	+4

III.—The South-west monsoon period.—The rains commenced slightly later than usual on the Bombay coast, and the monsoon current in the Arabian Sea was below its normal strength during the second and third weeks of June. The Bay of Bengal current was strong, and set in slightly earlier than usual. Monsoon conditions extended unusually rapidly into the interior and obtained over the whole of India from the commencement of the fourth week of June. South-west monsoon conditions continued with great steadiness during the next three months.

The variations of the mean humidity conditions from the normal during the whole period were not large. The absolute and relative humidities were both in steady excess over the greater part of India during the period, the excess being most marked in the Punjab, the North-Western Provinces, Rajputana and Central India, where the rainfall was, more especially when considered relatively to the normal, in considerable to large excess. The following

gives mean variation data for the period in the larger political divisions of Northern and Central India :—

Political Division.	Variation of mean absolute humidity from normal in					Variation of mean relative humidity from normal in				
	June 1894.	July 1894.	August 1894.	September 1894.	Mean of period June to September.	June 1894.	July 1894.	August 1894.	September 1894.	Mean of period June to September.
	"	"	"	"	"					
Burma .	+·008	+·005	+·005	+·015	+·008	+1	+1	+1	+1	+1
Bengal .	−·003	−·035	−·024	−·003	−·016	0	−1	0	−2	−1
Assam .	+·019	−·004	−·007	−·005	+·001	0	−1	+1	+3	+1
Orissa .	−·004	−·030	−·017	+·004	−·012	+1	−1	−1	−2	−1
Bihar .	+·005	−·035	−·019	+·017	−·008	+2	−4	+2	+3	+1
Chota Nagpur	+·031	−·057	−·037	−·015	−·020	+4	−4	−2	−2	−1
North-Western Provinces and Oudh.	+·089	−·007	+·012	+·040	+·034	+10	+2	+5	+4	+5
Punjab .	+·056	+·074	+·024	+·023	+·044	+6	+11	+3	+4	+6
Sind . .	+·043	+·027	+·006	+·009	+·021	+2	+5	0	−1	+2
Rajputana .	+·078	+·029	−·005	+·086	+·047	+12	+8	+1	+7	+7
Central India	+·056	+·001	+·015	+·059	+·033	+11	+1	+4	+5	+5

There was a slight deficiency in the amount of aqueous vapour present in the air during the month of July in North Bengal, Bihar and Assam, as is shown by the following returns for five stations :—

Station.	June.		July.	
	Percentage variation of absolute humidity.	Variation from normal of relative humidity.	Percentage variation of absolute humidity.	Variation from normal of relative humidity.
Darjeeling . . .	+1	−2	−1	0
Darbhanga . . .	0	+1	−4	−5
Dhubri	+3	−1	−1	0
Silchar	+1	−1	−1	−3
Sibsagar	+2	+2	+1	0

The increased humidity in North-Western India was most strongly shown in the East Punjab, East Rajputana and the North-Western Provinces, more especially at the following stations :—

Station.	Absolute humidity.							
	June.		July.		August.		September.	
	Actual average.	Percentage variation.	Actual average.	Percentage variation.	Actual average.	Percentage variation.	Actual average.	Percentage variation.
	"		"		"		"	
Ghazipur . . .	·888	+14	·952?	+ 3?	·958	+5	.939	+10
Agra	·757	+13	·897	− 2	·898	0	·838	+ 7
Roorkee . . .	·794	+25	·885	+ 1	·878	+2	·782	+ 2
Meerut . . .	·768	+12	·904	+ 2	·903	+3	·784	+ 4
Lahore . . .	·727	+20	·956	+11	·902	+4	·730	+ 2
Ludhiana . . .	·767	+21	·955	+10	·907	+4	·758	+ 2
Jeypore . . .	·755	+13	·844	− 1	·790	−3	·747	+11
Ajmere . . .	·789	+16	·851	+ 8	·801	+3	·789	+15
Saugor . . .	·723	+ 18	·803	+ 4	·793	+1	·799	+10

Humidity was also very largely in excess at the hill stations in the Punjab and the North-Western Provinces, for three of which comparative data are given below :—

Station.	Absolute humidity.							
	June.		July.		August.		September.	
	Average actual.	Percentage variation.	Average actual.	Percentage variation.	Average actual.	Percentage variation.	Average actual.	Percentage variation.
	"		"		"		"	
Simla . . .	·433	+ 5	·533	− 2	·517	−3	·441	−1
Ranikhet . . .	·549	+19	·591	+ 2	·580	+2	·526	+4
Chakrata . . .	·489	+20	·559	+10	·549	+1	·497	+6

The following gives comparative data for the larger political divisions of the Peninsula or Tropical India for the whole period :—

Political Division.	Variation of mean absolute humidity from normal in					Variation of mean relative humidity from normal in				
	June 1894.	July 1894.	August 1894.	September 1884.	South-west monsoon period 1894.	June 1894.	July 1894.	August 1894.	September 1894.	South-west monsoon, period 1894.
	"	"	"	"	"					
Berar .	+·021	−·017	−·012	+·045	+·009	+3	−2	−3	+7	+1
Central Provinces.	+·063	+·010	+·002	+·049	+·031	+10	+4	+2	+5	+5
Mysore .	+·001	−·011	+·029	+·019	+·010	−1	−3	+3	+1	0
Bombay .	+·012	−·001	+·002	−·002	+·003	0	0	−1	+1	0
Madras .	−·037	−·039	−·005	−·023	−·026	−5	−5	0	−2	−3

IV.—The retreating south-west monsoon period.—The humidity conditions of this period were very plainly marked, and were closely related to the abnormal rainfall distribution of the period. The following gives a summary of the more important features which, as will be seen, were very persistent throughout the period:—

(1) Humidity was in defect throughout the period in the Andamans and Burma, and was on the mean of the whole period normal or in slight excess in Assam, Bengal and Orissa. The following gives data in illustration of this feature:—

Province or Area.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	October 1894.	November 1894.	December 1894.	Mean of period.	October 1894.	November 1894.	December 1894.	Mean of period.
	"	"	"	"				
Port Blair .	+·006	−·119	−·035	−·049	0	−8	−5	−4
Burma . .	−·006	−·063	−·041	−·037	0	−5	−4	−3
Assam . .	+·047	+·009	+·015	+·024	+5	+3	+2	+3
Bengal . .	+·030	+·002	+·028	+·020	+1	+2	+2	+2
Orissa . .	+·042	+·009	+·023	+·025	+2	+1	−1	+1

(2) Humidity was more or less largely in excess throughout the period in Bihar, Chota Nagpur, the North-Western Provinces, the East Punjab, Rajputana, Central India and the Central Provinces, as is shown by the following data:—

Division.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	October 1894.	November 1894.	December 1894.	Mean of period.	October 1894.	November 1894.	December 1894.	Mean of period.
	"	"	"	"				
Bihar . .	+·098	+·071	+·045	+·071	+ 8	+ 8	+ 4	+ 7
Chota Nagpur .	+·098	+·045	+·063	+·069	+ 9	+ 5	+ 4	+ 6
North-Western Provinces.	+·105	+·084	+·065	+·085	+10	+11	+10	+10
East Punjab .	−·045	+·028	+·039	+·007	− 4	+ 6	+14	+ 5
Rajputana .	+·013	−·002	+·066	+·026	+ 1	+ 1	+11	+ 4
Central India .	+·146	+·115	+·105	+·122	+18	+16	+14	+16
Central Provinces.	+·101	+·053	+·086	+·080	+11	+10	+ 9	+10

(3) Humidity was almost as largely and persistently in excess during this period at the hill stations of the South-East Punjab and North-Western Provinces as in the adjacent plains. The following gives data for four stations:—

Station.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	October 1894.	November 1894.	December 1894.	Mean of period.	October 1894.	November 1894.	December 1894.	Mean of period.
	"	"	"	"				
Simla . .	+·016	+·008	0	+·008	+ 7	+ 8	+13	+ 9
Chakrata . .	+·086	+·042	+·027	+·052	+14	+11	+18	+14
Ranikhet .	+·086	+·026	+·015	+·042	+15	+10	+13	+13
Kailang . .	+·009	+·013	−·013	+·003	− 3	+16	+ 9	+ 7

(4) The season was even drier than usual in Baluchistan, Sind, the North and West Punjab and (probably) North-west Rajputana. The humidity conditions are clearly shown by the comparative data of the representative stations given below:—

Station.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	October 1894.	November 1894.	December 1894.	Mean of period, October to Dec.	October 1894.	November 1894.	December 1894.	Mean of period, October to Dec.
	"	"	"	"				
Quetta . .	−·043	−·004	+·005	−·014	−3	−5	+ 6	−1
Jacobabad .	−·017	+·003	−·067	−·027	−1	−6	−21	−9
Peshawar .	−·039	−·031	−·034	−·035	−6	−9	− 5	−7
Mooltan . .	−·034	−·044	+·017	−·020	−5	− 5	+ 3	−2

(5) Humidity was normal or in slight excess in the Deccan, North and Central Madras, and was more or less in defect in South Madras and the west coast districts throughout the period. The conditions are most clearly illustrated by the comparative data for five typical stations given below:—

Station.	Variation of mean absolute humidity from normal in				Variation of mean relative humidity from normal in			
	October 1894.	November 1894.	December 1894.	Mean of period, October to Dec.	October 1894.	November 1894.	December 1894.	Mean of period, October to Dec.
	"	"	"	"				
Bombay . .	−·007	−·066	0	−·024	+1	−5	+1	−1
Cochin . .	0	−·027	−·031	−·019	−1	−4	−6	−4
Sholapur . .	+·033	−·037	+·004	0	+4	0	−1	+1
Madras . .	+·046	+·022	+·044	+·037	+2	+2	+3	+2
Trichinopoly .	−·017	−·019	−·021	−·019	−6	−7	−5	−4

The year.—The means for the whole year given in the final columns of Tables XI and XII show that—

1st.—The mean absolute and relative humidities of the year were normal or very slightly in defect in Burma, Bengal and Orissa, and slightly above it in Assam.

2nd.—The mean absolute and relative humidity values of the year were in considerable excess in the large area including Bihar, Chota Nagpur, the North-Western Provinces, the East Punjab, East Rajputana, Central India, Berar, the Central Provinces and the Deccan. The mean absolute humidity for this area averaged about 030″ (or 5 per cent.) above the normal, and the mean relative humidity 3 in excess of the normal percentage (55).

3rd.—The mean absolute and relative humidities were on the mean of the year practically normal in the Indus Valley, North-West Rajputana and Baluchistan.

4th.—The mean humidity conditions of the year were in very slight excess and practically identical with the normal in Southern India, Mysore and Hyderabad.

These features were very persistent throughout the year. Thus, in the Upper Sub-Himalayas, the absolute and relative humidity values were above the normal for 10 out of 12 months and in the Deccan for 11 months out of the 12. The larger variations for the year hence represent abnormal conditions which were very persistent throughout the whole year.

The following gives the mean annual variations of these two elements of observation for each year from 1875 to 1894:—

	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Annual variation of pressure of vapour.	"	"	"	"	"	"	"	"	"	"
	−·004	−·017	+·011	+·020	−·014	−·004	+·001	−·008	−·013	−·012
	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
	"	"	"	"	"	"	"	"	"	"
	+·001	+·008	−·012	−·005	+·003	−·003	−·007	−·002	+·007	+·013

	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Annual variation of relative humidity.	+ 1	− 1	+ 1	0	− 1	0	0	0	− 1	0
	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
	0	+ 1	− 1	− 1	− 1	− 1	0	− 1	+ 3	+2

Cloud.

Variation data of this element of meteorological observation for the year 1894 are given in Tables XV and XVI. Table XV gives mean variation data for the 18 meteorological areas adopted in the geographical summaries of meteorological data in the Annual Reports previous to 1891, and Table XVI gives similar data for the ten meteorological provinces of India.

TABLE XV.—*Geographical summary of the cloud data of Table II in the monthly weather reviews of 1894.*

Meteorological Area.	Number of stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
North-West Himalaya	7	+0·8	+2·0	−0·6	−1·2	−0·8	+0·8	+1·0	+0·7	+0·5	−0·1	+2·0	+2·1	+0·6
Sikkim Himalaya, and Nepal.	2	−0·1	+1·7	−0·5	−0·2	+0·3	+1·2	+0·9	+1·4	+1·3	+3·0	+1·2	+0·7	+0·9
Punjab Plains .	4	+1·3	+2·3	−0·4	−1·1	−0·6	+0·7	+2·0	+0·3	+0·2	−0·4	+1·5	+1·8	+0·6
Gangetic Plain .	9	+0·3	+2·1	−0·3	−0·2	−0·9	+1·2	+0·1	+1·5	+0·4	+1·8	+1·2	+1·3	+0·7
Western Rajputana .	2—3	+0·1	+0·9	−1·2	−1·4	−0·2	+0·5	+0·9	+0·2	−0·2	−0·3	−0·1	+0·2	−0·1
Eastern Rajputana and Central India.	4	+0·2	+1·3	−0·4	−0·3	−1·0	+1·6	+0·5	+0·5	+0·6	+1·2	+0·3	+1·1	+0·5
Nerbudda Valley .	2—3	0	+0·8	+1·0	+0·6	−1·0	+1·4	+0·6	+0·5	+1·7	+1·8	−0·1	+0·3	+0·4
Chota Nagpur .	1	−0·6	+2·2	+1·0	+1·8	−0·4	+1·7	+0·3	+1·0	+1·6	+3·8	+1·6	+0·3	+1·2
Lower Bengal .	5	−0·7	+0·9	−0·2	+0·7	−0·4	+0·5	+0·3	+0·6	+1·0	+1·8	+0·2	+0·6	+0·4
Assam and Cachar .	4	−1·3	+0·3	−0·3	0	+0·4	+0·2	+0·2	+0·9	+1·2	+1·6	+0·3	+0·1	+0·3
Orissa and Sambalpur.	2	−0·2	+0·4	−0·2	+1·1	+0·1	+1·0	+0·5	+0·2	+0·5	+1·8	+0·1	−0·7	+0·4

TABLE XV.—*Geographical summary of the cloud data of Table II in the monthly weather reviews of 1894*—concld.

METEOROLOGICAL AREA.	Number of stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Central Provinces, (South) and Berar.	5	+0·3	+0·5	+0·8	+0·9	−0·2	+0·9	−0·1	−0·7	+0·7	+0·7	+0·1	+0·5	+0·4
Konkan . . .	3	−0·4	−0·4	+0·6	+0·6	−0·3	−0·3	+0·1	+0·4	+0·5	+1·5	−0·2	−0·2	+0·2
Malabar Coast .	1	−0·4	−1·1	−0·2	+0·3	−1·8	+0·3	+0·5	+1·2	−0·1	−0·7	−0·8	−0·8	−0·3
Deccan, Hyderabad and Mysore.	5	0	−0·1	+0·6	+0·9	−0·1	+0·4	+0·3	+0·5	+0·5	+1·0	+0·1	−0·8	+0·3
East Coast and Carnatic.	4	+0·4	+0·3	+0·2	+0·8	−1·0	−0·1	0	+0·6	+0·7	+0·2	+0·4	−0·7	+0·2
Arakan and Pegu .	4	−0·8	−0·1	+0·3	+0·2	+1·6	+1·1	+1·0	+0·7	+1·0	+0·7	−0·6	+0·6	+0·5
Bay Islands . .	1	+0·6	+0·2	+0·7	+1·8	+1·7	+2·0	+1·8	+1·8	+2·1	+1·8	+0·6	+0·6	+1·3
Extra Tropical .	41—42	+0·1	+1·5	−0·3	−0·3	−0·6	+0·9	+0·7	+0·8	+0·7	+1·2	+0·9	+1·1	+0·1
Tropical . . .	25	0	+0·1	+0·4	+0·8	0	+0·6	+0·3	+0·4	+0·7	+0·8	0	−0·2	+0·6
Whole of India .	66—67	+0·1	+1·0	0	+0·1	−0·4	+0·9	+0·5	+0·6	+0·7	+1·0	+0·6	+0·6	+0·5

TABLE XVI.—*Variation of the mean cloud amount from the normal in ten meteorological provinces of India in 1894.*

METEOROLOGICAL PROVINCE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Burma Coast and Bay Islands .	−0·5	−0·1	+0·4	+0·9	+1·8	+1·4	+1·2	+0·9	+1·2	+0·7	−0·4	+0·2	+0·6
Assam	−1·7	0	−0·6	−0·3	+0·3	−0·2	−0·3	+0·6	+1·0	+1·4	0	0	0
Bengal and Orissa . . .	−0·5	+0·6	−0·2	+0·6	−0·1	+0·7	+0·4	+0·6	+0·9	+1·8	+0·1	+0·3	+0·4
Gangetic Plain and Chota Nagpur.	−0·3	+2·1	0	+0·4	−1·0	+1·0	−0·2	+1·2	+0·7	+3·0	+1·1	+0·5	+0·7
Upper Sub-Himalayas . .	+1·2	+2·3	−0·5	−0·8	−0·8	+1·0	+1·2	+1·2	+0·3	+0·1	+1·6	+2·5	+0·8
Indus Valley and North-West Rajputana.	+0·7	+1·7	−0·7	−1·3	−0·3	+0·7	+1·6	+0·1	−0·1	−0·5	+0·7	+0·9	+0·3
East Rajputana, Central India and Gujarat.	+0·4	+1·3	−0·6	−0·3	−0·6	+1·6	+0·6	+0·7	+0·5	+0·7	+0·2	+1·1	+0·5
Deccan	0	+0·4	+0·6	+0·5	−0·5	+1·1	+0·5	−0·1	+0·9	+1·2	−0·1	0	+0·4
West Coast	−0·4	−0·6	+0·4	+0·6	−0·7	+0·3	+0·2	+0·6	+0·4	+1·0	−0·4	−0·6	+0·1
South India	+0·2	+0·1	+0·3	+0·9	−0·8	+0·2	+0·2	+0·6	+0·5	+0·4	+0·6	−0·8	+0·2

The following gives a brief statement of the chief features of the mean distribution of cloud in each period. In the tables the average or comparative data are given for the larger political divisions in order to present the facts from a slightly different point of view from that in Tables XV and XVI.

I.—The Cold weather period.—The variations of the cloud amount from the normal in this period were similar in character to those of the humidity conditions over nearly the whole of India.

(1) There was slightly less cloud than usual in Burma, Assam, Bengal and Orissa, the deficiency being moderate in amount in January and small in Burma in February. There was somewhat more cloud than usual in Bengal in February. The following gives mean data for the period :—

PROVINCE OR AREA.	MEAN CLOUD AMOUNT, COLD WEATHER PERIOD, 1894.		
	Actual.	Normal.	Variation from normal.
Port Blair (Andamans) . .	3·5	3·1	+0·4
Burma	1·4	2·0	−0·6
Assam	2·6	3·5	−0·9
Bengal	1·8	1·8	0
Orissa	2·2	2·1	+0·1

(2) Cloud was largely in excess in the area of largely increased humidity including Bihar, Chota Nagpur, the North-Western Provinces, Punjab, Sind, British Baluchistan, Rajputana, Central India, Berar and the Central Provinces (more especially the northern districts) as is shown in the following table :—

Division.	Mean cloud amount, cold weather period, 1894.		
	Actual.	Normal.	Variation from normal.
Bihar	2·4	2·1	+0·3
Chota Nagpur	3·0	2·2	+0·8
N.-W. Provinces and Oudh	4·2	2·7	+1·5
Punjab	5·5	3·7	+1·8
Sind	4·0	3·0	+1·0
Rajputana	3·2	2·6	+0·6
Central India	3·6	2·7	+0·9
Berar	1·9	1·8	+0·1
Central Provinces	2·1	1·6	+0·5

(3) Skies were also more densely clouded than usual at the hill stations in North-Western and Central India. The following shows the excess in the mean cloud amount of the period for six stations :—

Station.	Mean cloud amount, cold weather period 1894.		
	Actual.	Normal.	Variation from normal.
Quetta	4·9	4·2	+0·7
Leh	7·8	6·6	+1·2
Murree	7·0	5·7	+1·3
Simla	6·9	5·3	+1·6
Ranikhet	5·9	4·2	+1·7
Pachmarhi	2·3	2·1	+0·2

(4) Cloud was normal or in slight excess in the Deccan and in North and Central Madras. Data are given below for three stations in these areas :—

Station.	Mean cloud amount, cold weather period, 1894.		
	Actual.	Normal.	Variation from normal.
Sholapur	1·6	1·8	−0·2
Madras	3·7	3·3	+0·4
Bellary	3·5[p]	1·7	+1·8[p]

(5) Skies were even more free from cloud than usual in the west coast districts and in Mysore and South Madras. The following gives data for six stations in that area :—

Station.	Mean cloud amount, cold weather perio , 1894.		
	Actual.	Normal.	Variation from normal.
Bombay	0·4	1·4	−1·0
Ratnagiri	0·9	0·5	+0·4
Karwar	0·3	0·8	−0·5
Cochin	1·3	2·1	−0·8
Trichinopoly	3·0	3·5	−0·5
Bangalore	1·5	2·5	−1·0

II.—The hot weather period.—This was the only period of the year 1894 in which there was, on the whole, less cloud than usual. March was more serene than usual, except in Burma and the Peninsula. Skies were unusually free from cloud in Upper India in April, and over the whole of India, with the exception of Assam, East Bengal and Burma, in May. The mean cloud amount of May was in large excess in Burma. The following table gives variation data of each month and of the period for the larger political divisions :—

Political Division.	Variation of mean cloud amount from normal in			
	March 1894.	April 1894.	May 1894.	Mean of period.
Burma	+0·4	+0·6	+1·8	+0·9
Assam	−0·8	−0·3	+0·3	−0·3
Bengal and Orissa	−0·2	+0·8	−0·1	+0·2
Bihar and Chota Nagpur	0	+0·8	−1·1	−0·1
N.-W. Provinces and Oudh.	−0·2	−0·1	−0·7	−0·3
Punjab	−0·4	−1·0	−0·6	−0·7
Rajputana	−0·8	−0·6	−0·7	−0·7
Sind	−1·3	−1·7	+0·1	−1·0
Central India	−0·1	−0·1	−1·3	−0·5
Central Provinces	−0·7	+0·8	−0·6	−0·2
Bombay	+0·3	+0·5	−0·4	+0·1
Madras	+0·4	+1·1	−0·7	+0·3

III.—The south-west monsoon period.—Skies were more clouded than usual during this period, and the mean monthly cloud estimates were above the normal throughout the whole period, in all divisions with the exception of Assam and North Bengal in June and

July. The excess was largest absolutely in Burma, Chota Nagpur, the North-Western Provinces and Central Provinces, and relatively to the normal, in the Punjab and the North-Western Provinces. The following gives monthly variation data of this element for the larger political divisions :—

Political Division.	Variation of mean cloud amount from normal in				
	June 1894.	July 1894.	August 1894.	September 1894.	Mean of period.
Burma . . .	+1·1	+1·0	+0·6	+0·9	+0·9
Bengal . .	+0·6	+0·4	+0·7	+1·1	+0·7
Assam . . .	−0·2	−0·3	+0·6	+1·0	+0·3
Bihar	+0·8	−0·8	+1·1	+0·5	+0·4
Chota Nagpur . .	+1·7	+0·3	+1·0	+1·6	+1·2
N.-W. Provinces and Oudh	+1·3	+0·4	+1·6	+0·4	+0·9
Punjab . . .	+0·7	+2·0	+0·3	+0·2	+0·8
Sind	+0·6	+1·1	+0·3	−0·3	+0·4
Rajputana . . .	+1·4	+0·7	+0·2	+0·6	+0·7
Central India . .	+1·2	+0·4	+0·7	+0·6	+0·7
Central Provinces .	+1·6	+0·8	+0·6	+1·1	+1·0
Bombay . . .	+0·4	+0·3	+0·5	+0·5	+0·4
Madras . . .	+0·1	+0·2	+0·5	+0·5	+0·3

In the following table is a comparative statement showing the mean actual and normal amount of cloud in each of these divisions, and the variation of the actual from the normal for the whole period :—

Political Division.	Mean cloud amount during the south-west monsoon period, 1894.			
	Actual.	Normal.	Variation from normal.	Percentage variation.
Burma	8·9	8·0	+0·9	+11
Bengal . . .	8·4	7·7	+0·7	+ 9
Assam . . .	8·0	7·7	+0·3	+ 4
Bihar	6·9	6·5	+0·4	+ 6
Chota Nagpur . .	9·4	8·2	+1·2	+15
N.-W. Provinces and Oudh.	6·5	5·6	+0·9	+16
Punjab . . .	3·7	2·9	+0·8	+28
Sind	3·9	3·5	+0·4	+11
Rajputana . . .	6·3	5·6	+0·7	+13
Central India . .	7·2	6·5	+0·7	+11
Central Provinces .	8·0	7·0	+1·0	+14
Bombay . . .	8·1	7·7	+0·4	+ 5
Madras . . .	7·0	6·7	+0·3	+ 4

The only large and noteworthy abnormal local feature was the deficiency of cloud in Assam, North Bengal and Bihar in the months of June and July, which is partially indicated by the following :—

Station.	June.		July.	
	Actual cloud amount.	Percentage variation.	Actual cloud amount.	Percentage variation.
Darbhanga . . .	5·9	+26	5·9	− 6
Dhubri . . .	7·2	−1	7·4	+ 7
Sibsagar . . .	7·6	−10	6·9	−19

IV.—The retreating south-west monsoon period.—This period, as the preceding, was much more cloudy than usual. Cloud was in excess in October over the whole of India except Upper India and Baluchistan, and the excess was very large in the Gangetic plain. There was somewhat less cloud than usual in Burma and the west coast districts, and a large excess in November in the Gangetic plain. There was less cloud than usual in Southern India, the South Deccan and the west coast districts in December and more than usual in the remainder of India; but the excess was large only in the Punjab, the North-Western Provinces, the hill districts of Upper India, Sind and Rajputana. The following gives variation data for the larger political divisions for each month and for the whole period :—

Political Division.	Variation of mean cloud amount from normal in			
	October 1894.	November 1894.	December 1894.	Mean of period.
Burma . . .	+0·4	−0·7	0	−0·1
Bengal . . .	+1·8	+0·1	+0·6	+0·8
Assam . . .	+1·4	0	0	+0·5
Bihar . . .	+2·2	+0·7	+0·2	+1·0
Chota Nagpur . .	+3·8	+1·6	+0·3	+1·9
N.-W. Provinces and Oudh.	+1·8	+1·4	+1·7	+1·6
Punjab . . .	−0·4	+1·5	+1·8	+1·0
Sind . . .	−0·5	+0·2	+0·7	+0·1
Rajputana . . .	+0·4	−0·1	+0·9	+0·4
Central India . .	+1·8	+0·3	+0·5	+0·9
Central Provinces .	+1·3	+0·1	+0·3	+0·6
Bombay . . .	+1·0	−0·6	−0·7	−0·1
Madras . . .	+0·4	+0·8	−0·4	+0·3

Comparative data showing mean actual and normal cloud amounts are given for the same divisions in the following table :—

Political Division.	Mean cloud amount of the retreating south-west monsoon period, 1894.		
	Actual.	Normal.	Variation from normal.
Burma	4·0	4·1	−0·1
Bengal	3·8	3·0	+0·8
Assam	4·0	3·5	+0·5
Bihar	3·0	2·0	+1·0
Chota Nagpur	4·8	2·9	+1·9
N.-W. Provinces and Oudh	3·0	1·4	+1·6
Punjab	2·6	1·6	+1·0
Sind	1·4	1·3	+0·1
Rajputana	1·9	1·5	+0·4
Central India	2·6	1·7	+0·9
Central Provinces	2·4	1·8	+0·6
Bombay	3·4	3·5	−0·1
Madras	5·4	5·1	+0·3

The most noteworthy features of the period were the large excess of cloud in the Gangetic Plain and Bengal in October and in Upper India and Baluchistan in December.

Year.—The mean cloud amount of the year was normal in Assam and in excess over the remainder of India. The excess was small in the Peninsula to the south of Lat. 15° N., and was large in amount in Northern India (more especially the Punjab, the North-Western Provinces, Bihar and Chota Nagpur) and Burma. It was above the normal for the whole of India in three out of the four periods into which the year is divided, and was below it only in the hot weather. The following gives a brief summary of the data for the whole year :—

Area.	Variation of mean cloud amount from normal in				
	I Period.	II Period.	III Period.	IV Period.	Whole year.
Tropical India	+0·1	+0·4	+0·5	+0·2	+0·6
Extra-Tropical India	+0·8	−0·4	+0·8	+1·1	+0·1
Whole India	+0·6	−0·1	+0·7	+0·7	+0·5

The following table gives the variation of the mean amount of cloud in the Indian area, year by year, from 1875 to 1894 :—

Year.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Annual variation of cloud amount.	0	−0·2	+0·3	+0·1	−0·1	−0·1	−0·1	0	+0·1	−0·1
	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
	+0·2	+0·2	−0·1	−0·1	+0·	+0·2	+0·	+0·1	+0·5	+0·5

Rainfall.

The rainfall data of India are now issued in a separate volume. The fourth volume, that of 1894, contains the rainfall data of 2,180 stations, which are classified under their respective administrative divisions according to the following scheme :—

Province.	Number of stations.
Burma	132
Assam	99
Bengal, Bihar, Chota Nagpur and Orissa	324
N.-W. Provinces and Oudh	271
Punjab	203
Bombay	279
Madras	353
Coorg	9
Central Provinces	65
Berar	44
Mysore	79
Baluchistan	54
Kashmir	12
Rajputana	124
Central India	54
Hyderabad (Deccan)	24
Travancore	39
Cochin	3
Pudukota	12

The volume contains the whole of the available information for the year 1894 of this important element of meteorological observation.

The information includes monthly statements of—

(*a*) the actual rainfall day by day;

(*b*) the total of the month;

(*c*) the number of rainy days during the month;

(*d*) the average or normal rainfall of the month for all stations for which rainfall data for at least five years are available;

(*e*) the average or normal number of rainy days of the month for all stations for which rainfall data for five years or upwards are available;

(*f*) the accumulated rainfall (up to the date of each statement) throughout each of the seasons into which the year is divided.

Symon's rain-gauges are now used at all rain-gauge stations, with the exception of those in Mysore. The hour of measuring rainfall is 8 A.M. throughout India, and the amounts registered give the rainfall of the previous 24 hours, and hence generally of the rainfall of the previous civil day.

The following tables give summaries of the rainfall data of the year. In the first two tables (Tables XVII and XVIII) the summaries are drawn up in the form that was used for many years in the Annual Reports issued by the Department and are baseb on the rainfall returns of 385 selected stations. In the two succeeding tables (Tables XIX and XX) the actual average rainfall data (derived from the returns of the 2,180 rain gauge stations in India) are given for the 52 meteorological districts into which the Empire is divided for the comparison of crops and rainfall, for the four periods into which the year may be divided. The four periods are as follows:—

1st.—From January 1st to February 28th, which forms the period of the cold weather rains of Upper India.

2nd.—From March 1st to May 31st, which includes the hot season, when rain occurs mainly in the coast districts, and in Assam during thunderstorms.

3rd.—From June 1st to October 31st, which forms the period of the south-west monsoon rains proper.

4th.—From November 1st to December 31st, which includes the period of the so-called north-east monsoon rains of Southern India, more especially of the Coromandel coast districts.

TABLE XVII.—*Geographical Summary of Rainfall Anomalies in 1894.*

Meteorological Division.	Area, square miles.	Number of Stations.	Normal rainfall.	Actual rainfall, 1894.	Mean excess or defect.	Total excess, square miles, × 1 inch.	Total defect, square miles, × 1 inch.
			Inches.	Inches.	Inches.		
I Punjab Plains	120,000	29	21·52	29·75	+ 8·23	987,600	...
II North-Western Provinces and Oudh	83,500	45	37·49	59·14	+21·65	1,807,775	...
III Rajputana	67,000	19	28·42	29·80	+ 1·38	92,460	...
IV. Central India States	91,000	20	42·01	52·94	+10·93	994,630	...
V. Bihar	30,000	15	45·01	56·11	+11·10	333,000	...
VI. Western Bengal	38,000	10	49·39	61·48	+12 09	459,420	...
VII. Lower Bengal	54,000	28	66·64	65 84	− 0·80	...	43,200
VIII. Assam and Cachar	61,000	16	96·39	101·63	+ 5·24	319,640	...
IX. Orissa and Northern Circars	27,000	16	48·00	48·63	+ 0·63	17,010	...
X. Central Provinces, South	61,000	18	51·38	58·22	+ 6·84	417,240	...
XI. Berar and Khandesh	43,000	13	35·96	39·67	+ 3·71	159,530	...
XII. Gujarat	54,500	12	33·03	51·58	+18·55	1,010,975	...
XIII. Sind and Cutch	68,000	10	8·49	13·58	+ 5·09	346,120	...
XIV. North Deccan	48,000	13	30·54	29·80	− 0·74	...	35,520
XV. Konkan and Ghâts	16,000	11	138·92	146·69	+ 7·77	124,320	...
XVI. Malabar and Ghâts	18,000	8	113·89	110·59	− 3·30	...	59,400
XVII. Hyderabad	74,000	15	32·71	35·41	+ 2·70	199,800	...
XVIII. Mysore and Bellary	58,000	18	29·52	28·78	− 0·74	...	42,920
XIX. Carnatic	72,000	38	36·05	34·96	− 1·10	...	79,200
XX. Arakan	11,000	7	148·04	161·00	+12·96	142,560	260,240
XXI. Pegu	32,500	7	71·95	70·54	− 1·41	...	45,825
XXII. Tenasserim	10,500	4	172·38	198·12	+25·74	270,270	...
XXIII. Upper Burma	?	13	38·73	47·30	+ 8·57	...	...

On the mean of the whole area represented in the above table there was an excess of 6·48 inches or, excluding the Burmese Peninsula, 6·47 inches.

TABLE XVIII.—*Geographical Summary of the distribution of rainfall in 1894, according to seasons.*

Meteorological District.	January and February.			March to May.			June to October.			November and December.		
	Normal Average.	Actual Average, 1894.	Difference.	Normal Average.	Actual Average, 1894.	Difference.	Normal Average.	Actual Average, 1894.	Difference.	Normal Average.	Actual Average, 1894.	Difference.
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
North-West Himalayas	6·17	11·26	+5·09	7·61	6·83	− 0·78	40·53	63·56	+23·03	1·75	5·59	+ 3·84
Punjab Plains	2·08	4·24	+2·16	2·54	2·52	− 0·02	16·13	21·00	+ 4·87	0·77	2·00	+ 1·23
North-Western Provinces and Oudh	1·41	2·43	+1·02	1·42	0·64	− 0·78	35·25	54·32	+19·07	0·38	3·19	+ 2·81
Rajputana	0·46	0·80	+0·34	0·74	0·38	− 0·36	21·51	23·74	+ 2·23	0·22	1·16	+ 0·94
Central India States	0·91	1·46	+0·55	0·78	0·26	− 0·52	41·88	52·40	+10·52	0·67	1·79	+ 1·12
Bihar	1·17	0·99	−0·18	2·54	0·57	− 1·97	40·47	52·52	+12·05	0·31	1·71	+ 1·40
Western Bengal and Chota Nagpur	1·28	0·57	−0·71	3·48	1·16	− 2·32	46·49	59·77	+13·28	0·72	1·43	+ 0·71
Lower Bengal	1·41	0·46	−0·95	10·40	8·06	− 2·34	53·63	53·11	− 0·52	0·71	3·40	+ 2·69
Eastern Himalayas	1·56	1·34	−0·22	18·12	17·95	− 0·17	111·11	106·28	− 4·83	0·46	0·76	+ 0·30
Assam and Eastern Bengal	1·92	2·25	+0·33	26·16	22·94	− 3·22	87·78	74·07	−13·71	1·28	3·00	+ 1·72
Orissa and Northern Circars	0·68	0·49	−0·19	4·36	2·65	− 1·71	43·73	48·43	+ 4·70	2·86	2·15	− 0·71
Central Provinces, South	0·82	0·68	−0·14	1·80	0·37	− 1·43	48·34	57·09	+ 8·75	0·93	1·56	+ 0·63
Berar and Khandesh	0·47	0·35	−0·12	0·99	0·59	− 0·40	35·29	38·06	+ 2·77	1·37	0·67	− 0·70
Gujarat	0·20	0·11	−0·09	0·41	0·16	− 0·25	31·21	50·77	+19·56	0·31	0·15	− 0·16
Sind and Cutch	0·50	1·27	+0·77	0·50	0·05	− 0·45	7·88	14·31	+ 6·43	0·22	0·10	− 0·12
North Deccan	0·20	0·36	+0·16	3·13	4·00	+ 0·87	25·53	25·20	− 0·33	1·69	0·25	− 1·44
Konkan and Ghâts	0·28	0·18	−0·10	1·65	0·63	− 1·02	140·16	141·33	+ 1·17	1·12	0·06	− 1·06
Malabar and Ghâts	0·51	0·45	−0·06	11·09	12·34	+ 1·25	98·08	96·07	− 2·01	4·22	1·74	− 2·48
Hyderabad	0·16	0·48	+0·32	1·91	1·12	− 0·79	29·03	32·64	+ 3·61	1·74	1·55	− 0·19
Ceded Districts and Mysore	0·25	0·18	−0·07	4·65	6·33	+ 1·68	21·51	20·69	− 0·82	2·80	1·59	− 1·21
Carnatic	0·98	1·47	+0·49	4·15	4·28	+ 0·13	20·89	21·32	+ 0·43	10·76	7·88	− 2·88
Nilgiris	1·42	2·62	+1·20	9·28	13·21	+ 3·93	25·42	20·34	− 5·08	12·52	5·11	− 7·41
Arakan	1·01	0·57	−0·44	15·09	26·29	+11·20	128·90	131·43	+ 2·53	3·08	2·71	− 0·37
Pegu	0·24	0	−0·24	7·96	11·41	+ 3·45	66·50	66·46	− 0·04	3·11	0·67	− 2·44
Tenasserim	0·93	0·74	−0·19	20·91	29·72	+ 8·81	148·10	166·02	+17·92	2·35	1·64	− 0·71
Upper Burma	0·40	0·09	−0·31	5·49	6·76	+ 1·27	30·85	36·64	+ 5·79	1·29	2·04	+ 0·75
Bay Islands	2·19	0·29	−1·90	18·59	28·05	+ 9·46	81·25	67·55	−13·70	14·64	2·88	−11·76

TABLE XIX.—*Average rainfall data of the 52 meteorological divisions in India for the four seasons of the year 1894 and for the whole year.*

Province.	Division.	January and February.			March to May.			June to October.			November and December.			Whole Year.		
		Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.	Average actual rainfall.	Average normal rainfall.	Variation of actual from normal.
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Burma	Tenasserim	1·35	0·26	+1·09	34·88	24·65	+10·23	196·61	157·75	+38·86	0·29	1·59	−1·30	233·13	184·25	+48·88
	Lower Burma	·0	0·37	−0·37	16·64	12·71	+3·93	81·77	84·01	−2·24	0·84	3·95	−3·11	99·25	101·04	−1·79
	Central do.	0·02	0·12	−0·10	11·86	10·09	+1·77	63·38	73·11	−9·73	0·53	2·99	−2·46	75·79	86·31	−10·52
	Upper do.	0·11	?	?	7·31	?	?	37·71	?	?	2·43	?	?	47·56	?	?
	Arakan	0·05	0·20	−0·15	18·00	19·90	−1·90	147·00	155·41	−8·41	0·98	4·09	−3·11	166·03	179·60	−13·57
Bengal and Assam.	Eastern Bengal	1·00	1·58	−0·58	19·51	16·29	+3·22	71·77	70·16	+1·61	3·77	1·57	+2·20	96·05	89·60	+6·45
	Assam (Surma)	3·08	1·97	+1·11	46·34	37·65	+8·69	99·11	85·38	+13·73	6·62	1·53	+5·09	155·15	126·53	+28·62
	Do. (Brahmaputra)	2·81	2·38	+0·43	25·14	23·77	+1·37	71·41	59·92	+11·49	2·06	0·96	+1·10	101·42	87·03	+14·39
	Deltaic Bengal	0·55	1·63	−1·08	6·98	10·56	−3·58	48·35	48·91	−0·56	5·09	0·62	+4·47	60·97	61·72	−0·75
	Central do.	0·47	1·18	−0·71	4·15	7·37	−3·22	52·67	48·42	+4·25	2·25	0·42	+1·83	59·54	57·39	+2·15
	North do.	0·76	1·13	−0·37	15·27	15·14	+0·13	87·80	84·05	+3·75	0·74	0·32	+0·42	104·57	100·64	+3·93
	Orissa	0·35	1·28	−0·93	2·50	6·08	−3·58	52·68	49·26	+3·42	3·10	1·89	+1·21	58·63	58·51	+0·12
	Chota Nagpur	0·60	1·32	−0·72	1·20	3·63	−2·43	59·91	47·21	+12·70	1·22	0·81	+0·41	62·93	52·97	+9·96
	Bihar (South)	0·84	1·05	−0·21	0·57	2·42	−1·85	53·27	39·21	+14·06	1·49	0·44	+1·05	56·17	43·12	+13·05
	Do. (North)	0·73	1·05	−0·32	1·84	4·30	−2·46	53·45	45·70	+7·75	0·91	0·23	+0·68	56·93	51·28	+5·65
North-Western Provinces and Oudh.	North-Western Provinces (East)	2·09	0·98	+1·11	0·17	0·92	−0·75	60·89	35·97	+24·92	1·55	0·37	+1·18	64·70	38·24	+26·46
	Oudh (South)	2·40	0·95	+1·45	0·14	0·99	−0·85	58·76	33·72	+25·04	3·68	0·43	+3·25	64·98	36·09	+28·89
	Do. (North)	2·23	1·09	+1·14	0·24	1·55	−1·31	64·64	35·89	+28·75	2·58	0·42	+2·16	69·69	38·95	+30·74
	North-Western Provinces (Central).	2·11	0·79	+1·32	0·17	0·79	−0·62	51·69	31·98	+19·71	3·81	0·40	+3·41	57·78	33·96	+23·82
	North-Western Provinces (West).	1·98	0·84	+1·14	0·32	0·89	−0·57	33·39	26·76	+6·63	2·30	0·38	+1·92	37·99	28·87	+9·12
	North-Western Provinces (Submontane).	3·93	2·58	+1·35	1·70	2·80	−1·10	63·25	41·93	+21·32	3·45	0·52	+2·93	72·33	47·83	+24·50
Punjab	Punjab (South)	3·02	1·01	+2·01	0·54	1·22	−0·68	18·09	11·33	+6·76	1·21	0·31	+0·90	22·86	13·87	+8·99
	Do. (Central)	3·47	1·23	+2·24	0·80	1·47	−0·67	23·67	17·95	+5·72	2·56	0·34	+2·22	30·50	20·99	+9·51
	Do. (Submontane)	6·10	2·87	+3·23	2·17	2·58	−0·41	36·68	24·83	+11·85	4·42	0·73	+3·69	49·37	31·01	+18·36
	Do. (Hill Districts)	13·33	6·55	+6·78	7·60	8·43	−0·83	71·03	45·43	+25·60	9·76	1·60	+8·16	101·72	62·01	+39·71
	Do. (North-West)	5·88	3·54	+2·34	3·91	4·02	−0·11	19·72	15·00	+4·72	0·73	1·04	−0·31	30·24	23·60	+6·64
	Do. (West)	2·15	1·05	+1·10	2·19	1·60	+0·59	7·01	6·09	+1·52	0·30	0·28	+0·02	12·25	9·02	+3·23
Bombay and Malabar Coast Districts (Madras).	Malabar	0·32	0·35	−0·03	10·76	9·88	+0·88	105·84	112·09	−6·25	1·48	4·81	−3·33	118·40	127·13	−8·73
	Madras (South Central)	0·79	0·25	+0·54	6·53	6·06	+0·47	18·71	18·12	+0·59	2·21	5·13	−2·92	28·24	29·56	−1·32
	Coorg	0·02	?	?	9·50	?	?	67·82	?	?	1·54	?	?	78·88	?	?
	Mysore	0·12	0·17	−0·05	7·21	5·15	+2·06	22·10	25·93	−3·83	0·97	3·19	−2·22	30·40	34·44	−4·04
	Konkan	0·13	0·12	+0·01	0·92	2·08	−1·16	113·22	111·86	+1·36	0·10	1·24	−1·14	114·37	115·30	−0·93
	Bombay Deccan	0·33	0·10	+0·23	1·57	2·81	−1·24	32·42	31·61	+0·81	0·38	1·87	−1·49	34·70	36·39	−1·69
	Hyderabad (North)	0·88	0·16	+0·72	0·90	1·66	−0·76	34·80	31·85	+2·95	1·30	1·82	−0·52	37·88	35·49	+2·39
	Khandesh	0·47	0·13	+0·34	0·48	1·22	−0·74	36·12	30·03	+6·09	0·01	1·54	−1·53	37·08	32·92	+4·16
Central Provinces and Berar.	Berar	0·24	0·59	−0·35	0·62	?	?	37·58	?	?	1·13	?	?	39·57	?	?
	Central Provinces (West)	0·41	0·75	−0·34	0·56	0·96	−0·40	50·66	42·05	+8·61	1·28	0·88	+0·40	52·91	44·64	+8·27
	Do. (Central)	1·16	0·77	+0·39	0·35	1·27	−0·92	56·19	48·90	+7·29	1·39	0·70	+0·69	59·09	51·64	+7·45
	Do. (East)	0·64	0·81	−0·17	0·18	1·91	−1·73	61·03	46·43	+14·60	1·64	0·78	+0·86	63·49	49·93	+13·56
Bombay (North).	Gujarat	0·13	0·08	+0·05	0·09	0·32	−0·23	61·88	43·39	+18·49	0·02	0·24	−0·22	62·12	44·03	+18·19
	Kathiawar	0·11	0·14	−0·03	0·16	0·37	−0·21	44·93	27·32	+17·61	0·17	0·27	−0·10	45·37	28·10	+17·27
	Sind	0·91	0·69	+0·22	0·03	0·60	−0·57	7·63	4·52	+3·11	0·09	0·13	−0·04	8·66	5·94	+2·72
Rajputana and Central India.	Central India (East)	1·26	0·94	+0·32	0·16	0·73	−0·57	46·13	42·25	+3·88	1·74	0·94	+0·80	49·29	44·86	+4·43
	Rajputana (East) and Central India (West).	0·97	0·51	+0·46	0·30	0·81	−0·51	28·89	26·68	+2·21	1·61	0·27	+1·34	31·77	28·27	+3·50
	Rajputana (West)	0·46	0·35	+0·11	0·23	0·64	−0·41	13·92	10·81	+3·11	0·62	0·04	+0·58	15·23	11·84	+3·39
Madras	East Coast (North)	0·75	0·41	+0·34	2·56	3·28	−0·72	37·93	32·58	+5·35	2·22	4·26	−2·04	43·46	40·53	+2·93
	Do. (do.) (*a*)	0·91	0·26	+0·65	5·98	4·88	+1·10	58·41	51·93	+6·48	2·45	3·14	−0·79	67·75	60·21	+7·54
	Hyderabad (South)	0·53	0·25	+0·28	1·44	2·11	−0·67	29·66	26·74	+2·92	1·76	1·57	+0·19	33·39	30·67	+2·72
	Madras (Central)	0·21	0·08	+0·13	2·38	2·48	−0·10	21·34	21·10	+0·24	1·72	2·73	−1·01	25·65	26·39	−0·74
	East Coast (Central)	0·81	0·67	+0·14	1·40	2·06	−0·66	22·80	20·52	+2·28	7·25	11·94	−4·69	32·26	35·19	−2·93
	Do. (South)	1·84	0·78	+1·06	3·49	4·21	−0·72	22·91	23·63	−0·72	9·56	13·79	−4·23	37·80	42·41	−4·61
	Madras (South)	0·70	1·18	−0·48	6·13	5·12	+1·01	11·43	12·43	−1·00	8·41	11·14	−2·73	26·67	29·87	−3·20

TABLE XX.—*Average actual and normal number of rainy days in the 52 meteorological divisions in India for the four seasons of the year 1894 and for the whole year.*

Province.	Division.	January and February.			March to May.			June to October.			November and December.			Whole Year.		
		Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.	Average actual number of rainy days.	Average normal number of rainy days.	Variation of actual from normal.
Burma	Tenasserim	2·4	?	?	26·6	?	?	118·5	?	?	0·5	?	?	148·0	?	?
	Lower Burma	0	?	?	21·4	?	?	100·6	?	?	0·7	?	?	122·7	?	?
	Central do.	0	?	?	15·1	?	?	82·6	?	?	0·5	?	?	98·2	?	?
	Upper do.	0·4	?	?	12·6	?	?	53·1	?	?	4·2	?	?	70·3	?	?
	Arakan	0·2	?	?	17·3	?	?	108·3	?	?	2·0	?	?	127·8	?	?
Bengal and Assam.	Eastern Bengal	1·8	2·9	— 1·1	20·5	19·9	+0·6	77·1	74·0	+ 3·1	5·3	1·9	+3·4	105·0	98·7	+ 6·0
	Assam (Surma)	4·9	4·2	+ 0·7	37·7	37·7	0	96·1	84·1	+12·0	6·5	2·1	+4·4	145·5	128·1	+17·4
	Do. (Brahmaputra)	6·4	6·6	— 0·2	32·6	34·7	−2·1	78·3	67·6	+10·7	4·4	2·4	+2·0	121·7	111·3	+10·4
	Deltaic Bengal	1·2	2·7	— 1·5	10·4	14·2	−3·8	67·9	63·1	+ 4·8	4·0	1·4	+2·6	83·5	81·4	+ 2·1
	Central do.	1·3	2·3	— 1·0	7·2	10·9	−3·7	66·4	60·9	+ 5·5	2·9	1·0	+1·9	77·8	75·1	+ 2·7
	North do.	1·8	2·6	— 0·8	17·8	17·9	−0·1	80·4	70·3	+10·1	1·5	0·8	+0·7	101·5	91·6	+ 9·9
	Orissa	0·9	2·2	— 1·3	5·3	9·6	−4·3	66·4	59·9	+ 6·5	3·7	2·9	+0·8	76·3	74·6	+ 1·7
	Chota Nagpur	1·7	2·7	— 1·0	2·6	7·0	−4·4	73·2	63·7	+ 9·5	2·2	1·3	+0·9	79·7	74·7	+ 5·0
	Bihar (South)	2·6	2·5	+ 0·1	1·4	4·1	−2·7	61·5	47·2	+14·3	1·5	0·8	+0·7	67·0	54·6	+12·4
	Do. (North)	1·5	2·4	— 0·9	3·5	6·2	−2·7	59·6	49·4	+10·2	1·4	0·7	+0·7	66·0	58·7	+ 7·3
North-Western Provinces and Oudh.	North-Western Provinces (East).	4·7	2·1	+ 2·6	0·8	2·1	−1·3	63·8	41·1	+22·7	2·3	0·6	+1·7	71·6	45·9	+25·7
	Oudh (South)	4·9	2·0	+ 2·9	0·9	3·3	−2·4	54·6	37·8	+16·8	4·0	0·7	+3·3	64·4	43·8	+20·6
	Do. (North)	4·9	2·1	+ 2·8	0·8	2·5	−1·7	57·3	38·1	+19·2	3·7	0·7	+3·0	66·7	43·4	+23·3
	North-Western Provinces (Central).	5·3	1·9	+ 3·4	0·5	2·8	−2·3	50·9	35·3	+15·6	4·5	0·5	+4·0	61·2	40·5	+20·7
	North-Western Provinces (West).	4·1	2·1	+ 2·0	0·9	2·4	−1·5	39·7	30·9	+ 8·8	4·8	0·6	+4·2	49·5	36·0	+13·5
	North-Western Provinces (Submontane).	8·1	4·0	+ 4·1	2·8	3·5	−0·7	56·2	39·8	+16·4	6·0	0·9	+5·1	73·1	48·2	+24·9
Punjab	Punjab (South)	7·2	2·3	+ 4·9	1·8	2·6	−0·8	18·5	13·9	+ 4·6	2·9	0·5	+2·4	30·4	19·3	+11·1
	Do. (Central)	6·9	2·7	+ 4·2	2·6	3·3	−0·7	27·9	19·4	+ 8·5	4·8	0·6	+4·2	42·2	26·0	+16·2
	Do. (Submontane)	10·9	4·8	+ 6·1	5·5	4·9	+0·6	34·8	24·2	+10·6	6·4	1·1	+5·3	57·6	35·0	+22·6
	Do. (Hill Districts)	19·1	8·7	+10·4	12·8	13·2	−0·4	58·8	46·0	+12·8	11·6	2·2	+9·4	102·3	70·1	+32·2
	Do. (North-West)	10·6	5·5	+ 5·1	8·7	6·9	+1·8	22·2	17·5	+ 4·7	2·3	1·3	+1·0	43·8	31·2	+12·6
	Do. (West)	5·9	2·4	+ 3·5	4·0	3·3	+0·7	10·6	8·2	+ 2·4	1·2	0·5	+0·7	21·7	14·4	+ 7·3
Bombay and Malabar Coast Districts (Madras).	Malabar	0·5	0·5	0	15·0	12·4	+2·6	102·0	99·8	+ 2·2	2·7	7·0	−4·3	120·2	119·7	+ 0·5
	Madras (South Central)	1·1	0·5	+ 0·6	11·8	9·0	+2·8	29·7	27·8	+ 1·9	5·2	8·5	−3·3	47·8	45·8	+ 2·0
	Coorg	0	?	?	21·8	?	?	94·2	?	?	3·4	?	?	119·4	?	?
	Mysore	0·3	0·3	0	12·7	8·6	+4·1	37·2	39·7	− 2·5	2·1	4·9	−2·8	52·3	53·5	− 1·2
	Konkan	0·2	0·2	0	1·7	3·2	−1·5	102·6	94·3	+ 8·3	0·3	2·2	−1·9	104·8	99·9	+ 4·9
	Bombay Deccan	0·6	0·3	+0·3	6·6	5·7	+0·9	44·6	46·2	− 1·6	0·8	3·1	−2·3	52·6	55·3	− 2·7
	Hyderabad (North)	1·5	?	?	2·5	?		46·6	?	?	2·1	?	?	52·7	?	?
	Khandesh	0·9	0·2	+0·7	1·4	2·1	−0·7	49·3	42·1	+ 7·1	0	2·2	−2·2	51·6	46·6	+ 5·0
Central Provinces and Berar.	Berar	0·3	?	?	2·0	?	?	49·3	?	?	1·6	?	?	53·2	?	?
	Central Provinces (West)	1·2	1·4	−0·2	1·5	2·1	−0·6	62·4	49·1	+13·3	2·4	1·2	+1·2	67·5	53·8	+13·7
	Do. (Central)	2·5	1·7	+0·8	1·1	2·8	−1·7	69·5	52·4	+17·1	3·0	1·1	+1·9	76·1	58·0	+18·1
	Do. (East)	1·5	1·7	−0·2	0·5	3·7	−3·2	66·9	49·4	+17·5	2·2	1·1	+1·1	71·1	55·9	+15·2
Bombay (North).	Gujarat	0·3	0·2	+0·1	0·3	0·5	−0·2	57·5	48·0	+ 9·5	0·1	0·5	−0·4	58·2	49·2	+ 9·0
	Kathiawar	0·2	0·2	0	0·4	0·6	−0·2	39·8	27·7	+12·1	0·5	0·4	+0·1	40·9	28·9	+12·0
	Sind	1·3	?	?	0·1	?	?	7·4	?	?	0·4	?	?	9·2	?	?
Rajputana and Central India.	Central India (East)	3·1	?	?	0·5	?	?	54·2	?	?	3·2	?	?	61·0	?	?
	Rajputana (East) Central India (West).	1·9	?	?	0·9	?	?	30·1	?	?	2·9	?	?	35·8	?	?
	Rajputana (West)	1·6	?	?	0·7	?	?	16·8	?	?	1·2	?	?	20·3	?	?
Madras	East Coast (North)	1·3	0·7	+ 0·6	4·7	5·2	−0·5	53·5	43·2	+10·3	3·4	4·3	−0·9	62·9	53·4	+ 9·5
	Do. (do.) (a)	2·5	0·7	+ 1·8	11·0	9·7	+1·3	85·0	67·6	+17·4	3·5	5·3	−1·8	102·0	83·3	+18·7
	Hyderabad (South)	1·2	?	?	3·5	?	?	46·7	?	?	3·3	?	?	54·7	?	?
	Madras (Central)	0·4	0·2	+ 0·2	5·2	4·2	+1·0	32·6	30·8	+ 1·8	4·2	4·2	0	42·4	39·4	+ 3·0
	East Coast (Central)	1·4	0·8	+ 0·6	3·0	2·5	+0·5	30·2	27·1	+ 3·1	8·9	10·5	−1·6	43·5	40·9	+ 2·6
	Do. (South)	2·7	1·0	+ 0·7	5·2	4·8	+0·4	34·1	31·5	+ 2·6	14·5	14·0	+0·5	56·5	51·3	+ 5·2
	Madras (South)	1·3	1·8	− 0·5	9·2	7·5	+1·7	17·7	19·5	− 1·8	13·7	13·1	+0·6	41·9	41·8	+ 0·1

The cold weather period.—The rainfall of this period was very irregularly distributed in Northern India. It was in general and considerable excess in North-Western India, but was very scanty and in large defect relatively to the normal in North-Eastern India. A considerable number of cold weather storms affected the weather in Northern India during this period. Four advanced eastwards in January and three in February. They were all unusually diffused disturbances which either did not pass into North-Eastern India or filled up as they advanced eastwards, and were very feeble when they passed into that area. The precipitation due to these storms was hence almost restricted to North-Western India. The most noteworthy feature of these storms was that although they gave heavy snowfall in the Himalayan area, it was confined to considerably greater elevations than usual, and the snowfall was hence most largely in excess in the interior ranges and in Ladakh and the Karakorum mountain area.

The following data show that the precipitation was unusually large in amount at the hill stations in North-Western India :—

Station.	Rainfall.						
	Average actual, January 1894.	Average normal, January.	Average actual, February 1894.	Average normal, February.	Average actual of period, January and February 1894.	Average normal, January and February.	Variation from normal of period.
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Murree	8·55	3·52	5·46	3·73	14·01	7·25	+ 6·76
Simla	7·99	2·35	7·48	2·68	15·47	5·03	+10·44
Dalhousie	12·27	2·28	7·99	3·52	20·26	5·80	+14·46
Dharmsala	10·98	4·77	7·69	4·18	18·67	8·95	+ 9·72
Mussoorie	6·15	2·31	8·61	2·86	14·76	5·17	+ 9·59
Ranikhet	4·86	2·94	3·29	1·95	8·15	4·89	+ 3·26
Kilba	6·58	5·61	6·93	5·30	13·51	10·91	+ 2·60
Kailang	4·28	4·87	5·07	3·07	9·35	7·94	+ 1·41

Accurate snowfall measurements are now made at several stations in the Punjab Himalayas. The following gives the amounts as registered at several of these stations where the measurement is believed to be accurately made :—

District or State.	Station.	Height in feet above the sea-level.	Total snowfall in the month of				Total.	
			January 1894.		February 1894.			
			′	″	′	″	′	″
Punjab	Murree	6,344	9	1	4	10	13	11
Chamba	Tisa	5,000	1	10	Rain only		...	
	Thanela	7,000	12	1	3	10	15	11
	Kalatop	8,000	12	2	1	6	13	8
Gurhwal	Malla Dunpur.	...	8	6	9	6	18	0
	Malla Johar	...	14	6	16	6	31	0

The accumulation of snow on the lower ranges at the end of the winter was not nearly so large as in 1893. It was on the other hand very large in the higher Kashmir mountains and Ladakh.

The rainfall of the period was in moderate to large excess in Baluchistan, the Punjab, the western and central districts of the North-Western Provinces, Rajputana, Sind and Central India.

The following gives comparative data for this area of increased precipitation derived from the whole of the available data employed for the preparation of Table XIX :—

Province.	Rainfall during period, January and February.		
	Average actual, 1894.	Average normal.	Variation from normal.
	Inches.	Inches.	Inches.
Baluchistan	6·28	3·41	+2·87
Punjab	5·66	2·71	+2·95
N.-W. Provinces	2·46	1·21	+1·25
Sind	0·91	0·69	+0·22
Rajputana	0·72	0·43	+0·29
Central India	1·26	0·94	+0·32

The rainfall of the period was on the other hand scanty and below the normal in Burma (except Tenasserim), Bengal, Bihar, Chota Nagpur, Orissa, the Central Provinces and Berar, as is shown by the following data :—

Province.	Rainfall during period, January and February.		
	Average actual, 1894.	Average normal.	Variation from normal.
	Inch.	Inches.	Inch.
Burma (excluding Tenasserim)	0·05	0·23	—0·18
Bengal	0·70	1·38	—0·68
Bihar	0·79	1·05	—0·26
Chota Nagpur	0·60	1·32	—0·72
Orissa	0·35	1·28	—0·93
Central Provinces	0·74	0·78	—0·04
Berar	0·24	0·59	—0·35

The cold weather rains of Northern India ceased in February much earlier than usual and hot weather conditions were initiated in the Deccan and North-Eastern India at least a fortnight before the normal date.

Assam hence received its first spring rainfall in February, and although it obtained little rain in January, its total for

the period was above the normal, as is shown by the following data:—

Province.	Division.	Rainfall. Average actual, January 1894.	Average normal, January.	Average actual, February 1894.	Average normal, February.	Average actual of period January and February.	Average normal of period January and February.	Variation from normal period.
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Assam .	Brahmaputra .	0·34	1·05	2·47	1·33	2·81	2·38	+0·43
	Surma . .	0·05	0·62	3·03	1·35	3·08	1·97	+1·11

The rainfall in the Deccan and Southern India was also generally in slight excess due to causes similar to those producing the increased rainfall in Assam (*viz.*, the more frequent occurrence of thundershowers than usual in this period due to the very early establishment of hot weather conditions in the interior of the Peninsula). The following gives data:—

Division.	Rainfall. Average actual, January 1894.	Average normal, January.	Average actual, February 1894.	Average normal, February.	Average actual of period January and February 1894.	Average normal, January and February.	Variation from normal of period.
	Inches.	Inch.	Inch.	Inch.	Inches.	Inches.	Inches.
Mysore . . .	0	0·10	0·12	0·07	0·12	0·17	−0·05
Madras (South Central)	0·03	0·12	0·76	0·13	0·79	0·25	+0·54
East Coast (North) .	0·21	0·19	0·54	0·22	0·75	0·41	+0·34
Do. (do.) (*a*) .	0·48	0·07	0·43	0·19	0·91	0·26	+0·65
Madras (Central) .	0·05	0·05	0·16	0·03	0·21	0·08	+0·13
East Coast (Central) .	0·72	0·48	0·09	0·19	0·81	0·67	+0·14
Do. (South) .	1·00	0·48	0·84	0·30	1·84	0·78	+1·06
Madras (South) . .	0·12	0·61	0·58	0·57	0·70	1·18	−0·48
Hyderabad . .	0·37	0·12	0·34	0·09	0·71	0·21	+0·50
Bombay Deccan . .	0	0·07	0·33	0·03	0·33	0·10	+0·23

II.—Hot weather period.—The rainfall of this period was much less abnormal in character than that of the corresponding period of the two previous years. Weather was slightly more disturbed in Northern India in the month of March. It was drier than usual in North-Western and Central India in April. May was exceedingly hot and dry over the whole of India, with the exception of Burma, Assam and East Bengal.

Burma obtained heavy rain during the fourth week of April from a cyclonic storm which initiated feeble monsoon conditions in that area, and it hence received frequent moderate rainfall during the month of May before the burst of the monsoon proper. The rainfall of this period was hence in large excess in that area. Also as almost invariably occurs when hot weather conditions are more pronounced than usual in Northern and Central India, Assam and East Bengal received frequent thundershowers during the whole period, and hence the rainfall was more abundant than usual. The following gives data for that area of considerable increase of rainfall:—

Division.	Rainfall during period, March to May. Average actual, 1894.	Average normal.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Tenasserim	34·88	24·65	+10·23	+42
Burma (Lower)	16·64	12·71	+ 3·93	+31
Do. (Central)	11·86	10·09	+ 1·77	+18
Do. (Upper)	7·31	?	?	?
Arakan	18·00	19·90	− 1·90	−10
Assam (Brahmaputra) . . .	25·14	23·77	+ 1·37	+ 6
Do. (Surma)	46·34	37·65	+ 8·69	+23
Bengal (East)	19·51	16·29	+ 3·22	+20

The weather was unusually dry during the whole period (but more especially in May) in Orissa, West and Central Bengal, Bihar and Chota Nagpur. The following gives comparative data of the period for this area:—

Division.	Rainfall during period March to May. Average actual, 1894.	Average normal.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Bengal (Deltaic) . .	6·98	10·56	−3·58	−34
Do. (Central) . .	4·15	7·37	−3·22	−44
Do. (North) . .	15·27	15·14	+0·13	+ 1
Chota Nagpur . .	1·20	3·63	−2·43	−67
Bihar (South) . .	0·57	2·42	−1·85	−76
Do. (North) . .	1·84	4·30	−2·46	−57
Orissa	2·50	6·08	−3·58	−59

The rainfall was also more or less below the small normal of the period in the North-Western Provinces, the Punjab, Sind, Rajputana, Central India, Berar and the Central Provinces. The deficiency was small in the Punjab, and was large relatively to the normal in the

remaining districts. It exceeded one inch in the Konkan, Bombay Deccan and the Central Provinces. The following gives comparative data :—

Division.	Rainfall during period, March to May 1894.			
	Average actual, 1894.	Average normal.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
N.-W. Provinces and Oudh.	0·46	1·32	−0·86	−65
Punjab	2·87	3·22	−0·35	−11
Sind	0·03	0·60	−0·57	−95
Rajputana . . .	0·27	0·73	−0·46	−63
Central India . . .	0·16	0·73	−0·57	−78
Berar	0·62	1·11	−0·49	−44
Central Provinces . .	0·36	1·38	−1·02	−74
Konkan	0·92	2·08	−1·16	−56
Hyderabad . . .	0·48	1·22	−0·74	−60
Bombay Deccan . .	1·57	2·81	−1·24	−44

The rainfall of the period was in moderate excess over the greater part of the South Deccan and Southern India, chiefly due to more frequent showers than usual in May, *e.g.* :—

Division.	Rainfall during period, March to May 1894.			
	Average actual, 1894.	Average normal.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Mysore	7·21	5·15	+2·06	+40
Malabar	10·76	9·88	+0·88	+ 9
Madras (South Central) .	6·53	6·06	+0·47	+ 8
East Coast (North) (*a*) .	5·98	4·88	+1·10	+23
Madras (South) . .	6·13	5·12	+1·01	+20

South-west monsoon period.—The rainfall of this period was larger in amount than usual, and was very favourably distributed. No long break occurred in any part of India, and the distribution of rainfall from month to month was largely determined by the character and line of march of the cyclonic storms of the period.

Southern India received more frequent rainfall from thunderstorms in May than usual. The burst of heavy continuous rain, which initiates the south-west monsoon proper, occurred somewhat later than usual in the first week of June. The Arabian Sea monsoon current advanced rapidly northwards along the coast and also into the interior, and was established at Bombay on the 7th June. The advance over the Arabian Sea was effected more quietly than usual, as no cyclonic storm formed in that area during its progress towards India.

The Bay current was established considerably earlier than usual. The advance in the north of the Bay gave rise to the formation of a cyclonic storm, which formed in South Bengal on the 12th and 13th and advanced by a curved path to the Punjab, carrying the monsoon current with it. A second and more severe storm was generated in the third week of the month. The Bay current, although strong, was remarkably unsteady in June and July, giving rise to a series of cyclonic storms of unusual variety and intensity. It was on the other hand unusually steady in August and September. The following gives the dates of the establishment of the monsoon (*i.e.*, of the commencement of the heavy rainfall, which marked the burst of the monsoon) in different parts of India :—

Province.	Date.
Bengal	June 14th
Bihar	Do. 14th
Chota Nagpur	Do. 14th
N.-W. Provinces	Do. 16th
Punjab	Do. 17th
Malabar	Do. 6th
Konkan	Do. 8th
Deccan	Do. 7th
Central Provinces	Do. 7th
Central India	Do. 10th
Rajputana	Do. 10th

The following is a brief statement of the more important features of the rainfall of the period, firstly, from month to month, and lastly, for the whole period :—

June.—As has been stated above, the monsoon currents were established in the Bengal and Bombay coast districts during the second week of the month, and advanced with unusual rapidity over the whole area of their full extension to the East and North Punjab before the end of the third week of the month. The most striking feature of their advance was a cyclonic storm, which formed in Bengal and carried the monsoon current into the Punjab. This storm gave one of the heaviest downpours in the East Punjab, which it has experienced for many years. The

following gives the mean fall and the heaviest fall in the districts where it was most excessive:—

	Average actual rainfall in 24 hours preceding 8 A.M. of date		Total 48 hours.	Heaviest rainfall in 24 hours in district.
	18th.	19th.		
	Inches.	Inches.	Inches.	Inches.
Ferozepore	3·33	3·94	7·27	10·73
Jullunder	4·87	3·84	8·71	11·20
Gurdaspur	2·85	7·46	10·31	11·58
Hoshiarpore	4·36	4·20	8·56	10·97
Amritsar	0·97	7·36	8·33	10·17
Sialkot	0·63	4·30	4·93	7·20
Ludhiana	2·60	3·04	5·64	5·06

This storm also affected Kashmir and the Punjab hill districts, giving a heavy downpour which occasioned severe floods, more especially in the Kashmir valley. The following gives data for three stations in Kashmir and the Punjab hills of the fall during the whole storm period:—

Province.	Station.	Total rainfall during period 17th to 19th.
		Inches.
Punjab	Dalhousie	15·07
Do.	Nurpur	12·72
Kashmir	Ramban	7·00

A second storm formed in the Bay, whilst the preceding storm was breaking up. It advanced into the eastern and central districts of the North-Western Provinces, and was stationary in the eastern districts from the 24th to the 27th, during which it increased considerably in intensity and advanced thence through Bundelkhand on the 28th into Central Rajputana, where it filled up on the 29th and 30th. It may be noted that the two storms of the month had a special redevelopment after passing into the interior, in both cases accompanying prolonged excessive downpours. These storms largely affected the rainfall distribution of the month. They gave excessive rain over the greater part of North-Western and Central India, and the rainfall of the month was hence in very large excess in the Punjab (East), Rajputana, Gujarat, Kathiawar, Central India, and the North-Western Provinces. The following gives mean data for this area of excessive rain:—

Province.	Rainfall.			
	Average actual, June 1894	Average normal, June.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Punjab	6·59	2 18	+4·41	+202
N.-W. Provinces	8·72	4·22	+4·50	+107
Rajputana	5·19	2·33	+2·86	+123
Central India	9·75	6 02	+3·73	+ 62
Gujarat	10·74	6·26	+4·48	+ 72
Kathiawar	9·68	3·26	+6·42	+197

The rainfall of the month was in moderate excess in Orissa, Chota Nagpur and the Central Provinces, through which the storms passed during their advance from the Bay to North-Western India. The following gives comparative data for these areas:—

Province.	Rainfall.			
	Average actual, June 1894.	Average normal June.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Orissa	11·31	8·93	+2·38	+27
Chota Nagpur	11·11	7·83	+3·28	+42
Central Provinces	9·68	7·97	+1·71	+21

In consequence of the rapid advance of the Bengal current to Upper India and the strong determination of that current to the Gangetic Plain during the latter part of the month, Burma, Arakan, Bengal and North Bihar, which usually receive the greater part of the precipitation of the Bay current during this month, obtained less than usual, and the rainfall of the month was hence more or less below the normal in those areas, as is shown by the following:—

Division.	Rainfall.			
	Average actual, June 1894.	Average normal, June.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Burma	13·20	17·42	− 4·22	−24
Arakan	36·76	52·34	−15·58	−30
Bengal	14·28	15·86	−1·58	−10
North Bihar	8·48	8·61	−0·13	− 2

Similarly, the increased indraught of the Bombay current to the Gangetic Plain and the East Punjab diminished the rainfall in the West coast districts and over the greater part of the Peninsula. The following gives comparative data showing the extent of the deficiency in that area:—

Province.	Rainfall.			
	Average actual, June 1894.	Average normal, June.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Madras	2·83	3·56	−0·73	−21
Mysore	2·35	4·00	−1·65	−41
Hyderabad	3·64	5 11	−1·47	−29
Bombay Deccan	5·38	5·75	−0·37	− 6
Khandesh	5·23	5·69	−0·46	− 8
Malabar	32·79	37·30	−4·51	−12
Berar	7·00	7·82	−0·82	−10
Konkan	25·29	27·15	−1·86	− 7

The deficiency was hence large in amount in Mysore, Hyderabad and the greater part of Madras (more especially the southern and central districts).

July.—The distribution of the rainfall of the month was very largely determined by a succession of three cyclonic storms which formed in the north of the Bay of Bengal and advanced along slightly different paths in a general west-north-westerly direction to Sind and were broken up by the Baluchistan mountain ranges. During the early stages of these storms they were maintained chiefly by the Bay current, and during their later stages, when passing through the Central Provinces, Central Rajputana and Sind, by the Bombay current. Each of these storms gave more or less heavy and general rain to the areas over which they passed, and the rainfall tended to increase during their later stages when they were approaching the west coast and coming more under the influence of the Bombay current. The third storm of the series, which marched slowly across the head of the peninsula with an average velocity of only about 8 miles per hour, gave excessive rain in Orissa, the Central Provinces and Central India, and as it approached the west coast increased very largely in-draught from the Arabian Sea. The Konkan, Gujarat, Kathiawar, Cutch, South-West Rajputana and Lower Sind hence received an excessive burst or cyclonic down-pour during the period of this storm from the 18th to the 26th. The following gives the average total rainfall due to the storm in these areas:—

Division.	Total rainfall for the period, 17th to 24th July 1894.	Normal rainfall, July.	Heaviest fall in 24 hours.
	Inches.	Inches.	Inches.
Orissa	7·06	12·41	15·50
Central Provinces	5·44?	15·97	10·50
Berar	8·56	?	13·68
Kathiawar	10·59	12·39	17·68
Gujarat	10·42	18·46	9·07
Cutch	12·43	10·00	12·84
Lower Sind	3·28	2·40	6·04
Konkan	18·47	40·04	12·59

Rainfalls in 24 hours, ranging in amount between 10 and 18 inches, were received at a large number of stations in the Konkan, Gujarat and Kathiawar during the period from the 18th to the 26th.

The rainfall of the month was hence more or less largely in excess in the broad belt of country over which the series of storms passed, *viz.*, Orissa, Chota Nagpur, the Central Provinces, Gujarat, Kathiawar, Sind, Khandesh, Berar and the Konkan. The following gives data for these areas:—

Province.	Rainfall.			
	Average actual, July 1894.	Average normal, July.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Orissa	17·33	12·41	+ 4·92	+ 40
Chota Nagpur	17·17	13·15	+ 4·02	+ 31
Central Provinces	18·25	15·97	+ 2·28	+ 14
Gujarat	29·63	18·46	+11·17	+ 61
Kathiawar	24·92	12·39	+12·53	+ 101
Sind	7·15	1·86	+ 5·29	+ 284
Khandesh	13·62	7·67	+ 5·95	+ 78
Berar	13·46	9·13	+ 4·33	+ 47
Konkan	48·82	40·04	+ 8·78	+ 22

The most remarkable feature of the month was the abnormal and excessive rainfall in Lower Sind, Cutch and Kathiawar due to the advance of the storms towards that area. The rainfall in Sind and Cutch in July 1894 is undoubtedly the heaviest that has occurred for at least 20 years. The following comparative data for eight stations illustrate more fully the very abnormal character of the rainfall of the month in that area:—

District.	Station.	Rainfall.		
		Actual, July 1894.	Normal, July.	Variation from normal.
Kathiawar	Rajkot	33·21	14·11	+19·10
	Morvi	39·85	9·50?	30·35?
	Wadhwan	21·65	9·76	+11·89
	Vankaner	31·59	9·50?	22·09?
Cutch	Bhuj	24·32	5·46	+18·86
	Rahpur	28·88	7·06	+21·82
Lower Sind	Kurrachee	22·18	2·90	+19·28
	Shahbandar	24·59	3·02?	+21·57?

The indraught of the Bombay current to these storms largely diminished the rainfall in Southern India, and the total rainfall of the month was hence in general defect

in South and Central Madras, Mysore, Hyderabad and Malabar, as is shown by the following :—

Division.	Rainfall.			
	Average actual, July 1894.	Average normal, July.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Malabar	29·30	34·42	−5·12	−15
Mysore	5·38	6·48	−1·10	−17
South and Central Madras	2·08	2·13	−0·05	− 2
Hyderabad	5·11	7·18	−2·07	−29

Arakan received heavier rainfall, chiefly due to increased precipitation during the formation and early stages of the storms of the month. South Bengal and Bihar shared in the heavy rainfall accompanying the advance of the storms and hence obtained somewhat larger amounts than usual. The East and South Punjab and the Upper India hill districts received heavy rain from the Bombay current in the intervals between the breaking up of one storm in Sind and Baluchistan, and the advance of the succeeding storm of the series into the Central Provinces or Central India, when the Bombay current was again diverted into the advancing storm whirl. The following gives data for these areas of increased rainfall in July and also for Burma and Rajputana where the rainfall was normal in amount :—

Division.	Rainfall.		
	Average actual, July 1894.	Average normal, July.	Variation from normal.
	Inches.	Inches.	Inches.
Tenasserim	48·31	47·33	+ 0·98
Arakan	49·56	48·28	+ 1·28
Deltaic and Central Bengal	14·30	12·12	+ 2·18
Bihar (South)	14·61	11·87	+ 2·74
Punjab plains	8·32	5·60	+ 2·72
Do. hills	27·13	16·68	+10·45
Rajputana	7·01	6·55	+ 0·46

The whole of India to the north of the belt of country covered by the storms, with the exception of the areas named in the preceding table, had less rain than usual, as is shown by the following data :—

Division.	Rainfall.		
	Average actual, July 1894.	Average normal.	Variation from normal.
	Inches.	Inches.	Inches.
Assam	13·71	17·34	−3·63
North Bengal	12·76	20·03	−7·27
North Bihar	10·65	12·22	−1·57
N.-W. Provinces	11·66	11·73	−0·07

The deficiency was large in the following districts of Assam, North Bengal and Bihar :—

District.	Rainfall.			
	Average actual, July 1894.	Average normal, July.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Goalpara	9·22	16·31	− 7·09	−43
Kuch Bihar	6·88	22·56	−15·68	−69
Rangpur	4·60	16·48	−11·88	−72
Darbhanga	5·41	11·89	− 6·48	−54
Muzaffarpur	5·47	11·81	− 6·34	−54
Dinajpur	7·78	13·45	− 5·67	−42

A noteworthy feature of the rainfall in Bihar and North Bengal was the great irregularity of its distribution. The following gives examples for four districts in those areas :—

District.	Station.	Rainfall.		
		Average actual, July 1894.	Average normal, July.	Variation from normal.
		Inches.	Inches.	Inches.
Kuch Bihar	Dinhatta	2·14	13·56	−11·42
	Kuch Bihar	6·88	22·56	−15·68
	Mickliganj	17·82	20·44	− 2·62
Dinajpur	Churamon	17·85	11·90	+ 5·95
	Dinajpur	7·78	13·45	− 5·67
Saran	Gopalganj	9·55	12·51	− 2·96
	Saran	20·91	11·73	+ 9·18
	Chapra	13·04	12·30	+ 0·74
Champaran	Motihari	6·30	10·45	− 4·15
	Bettiah	15·75	12·68	+ 3·07

August—Was singularly free from cyclonic storms. Both currents held steadily during the month, and there was no prolonged break such as frequently occurs in the month. The most noteworthy feature of the month was the increased precipitation in several areas which had received scanty rainfall in June and July. The following gives a summary of the chief features of the rainfall distribution of the month :—

1st.—The rainfall of the month was more or less in excess over nearly the greater part of Burma, and in Bengal, Bihar and Chota Nagpur. The excess was on the whole largest in the districts in North Bihar and North Bengal, where it had been very scanty in the previous month. The following gives comparative data for this area of increased rainfall and also for Assam :—

Division.	Rainfall.		
	Average actual, August 1894.	Average normal.	Variation from normal.
	Inches.	Inches.	Inches.
Tenasserim	45·38	37·52	+7·86
Burma	13·67	18·88	—5·21
Arakan	36·92	32·00	+4·92
Bengal	16·39	15·23	+1·16
Assam	17·20	17·30	—0·10
Bihar (South)	13·96	11·28	+2·68
Do. (North)	15·23	15·01	+3·73
Chota Nagpur	18·09	14·77	+3·32

The following gives rainfall averages for the districts in North Bengal and Bihar in which the precipitation of the previous month was most largely in defect :—

District.	Rainfall.			
	Average actual, August 1894.	Average normal, August.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Muzaffarpur	8·39	10·08	—1·69	—17
Darbhanga	16·42	10·75	+5·67	+53
Bhagalpore	13·35	11·35	+2·00	+18
Rangpur	11·22	12·40	—1·18	—10
Kuch Bihar	19·06	21·83	—2·77	—13
Goalpara	13·62	12·23	+1·39	+11
Dinajpur	12·59	11·87	+0·72	+6

2nd.—The rainfall of the month was in large excess in the North-Western Provinces and the Punjab hill districts. This increased rainfall was due to frequent heavy rain and the occurrence of local heavy downpours for periods of reveral days. The chief centres of these local downpours during the month were the districts of Dehra Dun, Naini Tal, Pilibhit, Bareilly and Shahjehanpur, Bahraich, Sitapur and Barabanki.

The following gives complete data for these districts :—

District.	Rainfall.			
	Average actual, August 1894.	Average normal, August.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Dehra Dun	36·77	26·97	+9·80	+36
Naini Tal	26·59	17·64	+8·95	+51
Pilibhit	28·38	13·72	+14·66	+107
Bareilly	29·69	11·01	+18·68	+170
Shahjehanpur	21·66	7·38	+14·28	+193
Bahraich	22·13	10·52	+11·61	+110
Sitapur	25·81	9·62	+16·19	+168
Barabanki	20·13	9·97	+10·16	+102

The excessive character of the rainfall in these districts is shown even more fully by the following data for single stations :—

District.	Station.	Rainfall.		
		Average actual, August 1894.	Average normal, August.	Variation from normal.
		Inches.	Inches.	Inches.
Dehra Dun	Rajpur	67·30	?	?
Sitapur	Biswan	30·00	10·14	+19·86
Barabanki	Nawabganj	22·00	8·06	+13·94
Shahjehanpur	Tilhar	25·30	10·15	+15·15
Bareilly	Mirganj	34·38	10·60	+23·78
Pilibhit	Pilibhit	36·40	12·89	+23·51

The following gives comparative data for this area of excessive rainfall in August :—

Division.	Rainfall.			
	Average actual, August 1894.	Average normal, August.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Oudh (North)	20·81	10·44	+10·37	+99
Do. (South)	16·44	10·47	+ 5·97	+57
N.-W. Provinces (East)	15·51	10·79	+ 4·72	+44
Do. (Central)	14·44	10·32	+ 4·12	+50
Do. (West)	11·81	8·69	+ 3·12	+36
Do. (Submontane)	21·53	12·93	+ 8·60	+67
Punjab Hills	23·11	16·67	+ 6·44	+39

3rd.—The rainfall of the month was in moderate to large defect in Sind, Cutch, Kathiawar, the west and central districts of Rajputana, Khandesh, Berar, the greater part of Central India and the Konkan, all of which districts had received a large excess of rain in the previous month. The following gives comparative data :—

Division.	Rainfall.			
	Average actual, August 1894.	Average normal, August.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Sind	0·19	1·94	−1·75	−90
Cutch	0·37	3·48	−3·11	−89
Kathiawar	2·01	6·28	−4·27	−68
Rajputana (West)	2·68	4·48	−1·80	−40
Khandesh	2·68	5·99	−3·31	−55
Berar	2·81	7·70	−4·89	−64
Central India	7·88	10·65	−2·77	−26
Konkan	19·10	24·15	−5·05	−21

4th.—It was in moderate to largish excess in Hyderabad, Malabar, Mysore and South and Central Madras, where the rainfall had been seriously in defect during the preceding two months.

Comparative data of this area for the month are given below :—

Division.	Rainfall.		
	Average actual, August 1894.	Average normal, August.	Variation from normal.
	Inches.	Inches.	Inches.
Malabar	28·26	20·13	+8·13
South and Central Madras	4·94	3·19	+1·75
Mysore	5·68	5·08	+0·60
Hyderabad	7·39	7·25	+0·14

The rainfall in the remaining areas, including the Punjab, Central Provinces, the Bombay Deccan and North Madras, differed little in amount from the normal.

The distribution of the rainfall of the month was hence over the greater part of India complementary or inverse in its character and distribution to that of the preceding month.

September.—The monsoon currents were considerably stronger and steadier than usual in the month. Three feeble depressions formed in the north of the Bay. The first and third advanced by curved paths to the Gangetic Plain, and the second to the Central Provinces. They were all extensive diffused disturbances, and gave moderate general rain over the large area including North-Eastern India, the North-Western Provinces, Central India and the Central Provinces. The Bombay current held steadily throughout the month, with the exception of a short period from the 17th to the 22nd, when it was feeble and gave little or no rainfall except in the west coast districts. The distribution of the rainfall of the month resembled in one important respect that of the previous month, *viz.*, that it was on the whole most abundant in the areas which had received deficient rain in June and July. The following gives a summary of the chief features of the distribution of the rainfall of September 1894 :—

1st.—The rainfall of the month was in large excess in Tenasserim, normal in Burma, and in moderate defect in Arakan.

Division.	Rainfall.			
	Average actual, September 1894.	Average normal, September.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Tenasserim	42·97	23·57	+19·40	+82
Burma	10·79	11·73	− 0·94	−8
Arakan	14·74	20·03	− 5·29	−26

2nd.—It was somewhat irregularly distributed in Bengal and was in slight to moderate defect in South and East Bengal, Chota Nagpur and Orissa. It was in largish excess in Bihar, North Bengal and Assam, as is shown by the following data:—

Division.	Rainfall.		
	Average actual, September 1894.	Average normal, September.	Variation from normal.
	Inches.	Inches.	Inches.
Bihar (North)	12·40	9·79	+2·61
Do. (South)	9·41	7·14	+2·27
Bengal (North)	23·87	16·07	+7·80
Assam (Surma)	18·50	16·54	+1·96
Do. (Brahmaputra)	16·96	10·78	+6·18

The excess was hence most marked in the Assam valley and North Bengal, in which it had been very deficient in June and July.

3rd.—The rainfall of the period was more uniformly distributed than usual in the Punjab, North-Western Provinces, Rajputana, Central India and the Central Provinces, and was in moderate general excess, *e.g.*—

Province.	Rainfall.			
	Average actual, September 1894.	Average normal, September.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Punjab	3·88	3·15	+0·73	+23
N.-W. Provinces	7·91	6·56	+1·35	+21
Rajputana	3·43	2·50	+0·93	+37
Central India	8·38	6·69	+1·69	+25
Central Provinces	10·91	8·12	+2·79	+34

4th.—It was largely in excess in Khandesh, Hyderabad and Berar, the excess being most pronounced in Hyderabad, where the rainfall was very deficient in June and July. The following gives data:—

Province.	Rainfall.			
	Average actual, September 1894.	Average normal, September.	Variation from Normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Khandesh	10·11	7·07	+3·04	+43
Berar	10·22	6·82	+3·40	+50
Hyderabad	12·99	6·87	+6·12	+89

5th.—The rainfall of the month was in slight defect over the whole of Central and South Madras, Malabar, Mysore, the Konkan and Bombay Deccan area, in which the amount of the rainfall usually varies inversely to that in North-Western and Central India. The following gives comparative data for these areas:—

Division.	Rainfall.		
	Average actual, September 1894.	Average normal, September.	Variation from normal.
	Inches.	Inches.	Inches.
Madras (Central)	3·38	5·40	−2·02
Do. (East Coast)	6·55	6·01	+0·54
Do. (South)	1·86	2·23	−0·37
Do. (South Central)	2·62	3·82	−1·20
Malabar	8·35	10·20	−1·85
Mysore	1·80	4·83	−3·03
Konkan	13·32	14·97	−1·65
Bombay Deccan	4·37	5·54	−1·17

The deficiency was nowhere large in actual amount, but was large relatively to the normal in Mysore and Central Madras.

The rainfall of the month was hence on the whole favourably distributed. It was in excess over nearly the whole of Northern and Central India and the North and East Deccan, the excess being most marked in the districts where it was most deficient in July, *viz.*, Assam, North Bengal and Hyderabad. The rainfall was moreover not due to short cyclonic downpours in any part of India but occurred as frequent and well-distributed showers.

The chief features of the distribution of the rainfall in October are given below, pages 647 and 648.

The following summarizes the chief features of the distribution of the south-west monsoon rainfall from June to October:—

1st.—The rainfall of the period was in large excess

in Tenasserim, and was normal or in slight defect in Burma and Arakan :—

Division.	Rainfall during period, June to October.		
	Average actual, 1894.	Average normal.	Variation from normal.
	Inches.	Inches.	Inches.
Tenasserim	196·61	157·75	+38·86
Burma	72·58	78·56	− 5·98
Arakan	147·00	155·41	− 8·41

2nd.—It was in moderate excess in Assam and North Bihar, in slight excess in Bengal and in largish excess in South Bihar and Chota Nagpur :—

Division.	Rainfall during period, June to October.			Number of rainy days during period, June to October.		
	Average actual, 1894.	Average normal.	Variation from normal.	Average actual, 1894.	Average normal.	Variation from normal.
	Inches.	Inches.	Inches.			
Assam . .	85·26	72·65	+12·61	87·2	75·9	+11·4
Bengal . .	65·15	62·89	+ 2·26	73·0	67·1	+ 5·9
North Bihar . .	53·45	45·70	+ 7·75	59·6	49·4	+10·2
South Do. .	53·27	39·21	+14·06	61·5	47·2	+14·3
Chota Nagpur .	59·91	47·21	+12·70	73·2	63·7	+ 9·5

3rd.—The most remarkable feature of the monsoon was the very large excess in the North-Western Provinces and the Punjab hill districts due to heavier and more frequent rainfall than usual during the whole period, but more especially in October. The following gives data for this area :—

Division.	Rainfall during period, June to October.		
	Average actual, 1894.	Average normal.	Variation from normal.
	Inches.	Inches.	Inches.
Oudh (North) . . .	64·64	35·89	+28·75
Do. (South) . . .	58·76	33·72	+25·04
N.-W. Provinces (East) . .	60·89	35·97	+24·92
Do. (Central) .	51·69	31·98	+19·71
Do. (West) . .	33·39	26·76	+ 6·63
Do. (Submontane)	63·25	41·93	+21·32
Punjab Hills . . .	71·03	45·43	+25·60

The following table shows that this increase was very largely due to more frequent rain (and to the absence of any prolonged break) during the whole period :—

Division.	Number of rainy days during period, June to October.		Ratio of actual rainfall to actual number of rainy days.	Ratio of normal rainfall to normal number of rainy days.
	Average, actual 1894.	Average normal.		
Oudh (North) . . .	57·3	38·1	1·13	0·94
Do. (South) . . .	54·6	37·8	1·08	0·89
N.-W. Provinces (East) . .	63·8	41·1	0·95	0·88
Do. (Central) .	50·9	35·3	1·02	0·91
Do. (West) .	39·7	30·9	0·84	0·87
Do. (Submontane)	56·2	39·8	1·13	1·05
Punjab Hills	58·8	46·0	1·21	0·99

The data for North Oudh for example show that the number of rainy days was 50 per cent. greater than the normal, and that the rainfall per rainy day was greater than the normal by 25 per cent. very approximately. Similar relations obtain for other districts.

4th.—The rainfall of the period was largely in excess in the Punjab, Sind, Kathiawar, Cutch and Gujarat, and in moderate excess in the Central Provinces, Central India, Rajputana and (probably) Berar.

The excess in those areas was largely due to the excessive cyclonic downpours which accompanied the passage of the June and July storms through these areas. The following gives comparative data of the total rainfall of the period in these areas :—

Province.	Rainfall during period, June to October.			
	Average actual, 1894.	Average normal.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Punjab	29·47	20·11	+ 9·36	+47
Sind	7·63	4·52	+ 3·11	+69
Kathiawar	44·93	27·32	+17·61	+64
Gujarat	61·88	43·39	+18·49	+43
Central Provinces . . .	55·96	45·79	+10·17	+22
Rajputana	21·41	18·75	+ 2·66	+14
Central India . . .	46·13	42·25	+ 3·88	+ 9

In the following table are given corresponding data for the number of rainy days in the period in the districts given in the preceding table :—

Division.	Number of rainy days during period, June to October.		Ratio actual rainfall to actual number of rainy days.	Ratio of normal rainfall to normal number of rainy days.
	Average actual, 1894.	Average normal.		
Punjab	28·8	21·5	1·02	0·94
Sind	7·4	?	1·03	?
Kathiawar	39·8	27·7	1·13	0·99
Gujarat	57·5	48·0	1·08	0·90
Central Provinces . . .	66·3	50·3	0·84	0·91
Rajputana	23·5	?	0·91	?
Central India . . .	54·2	?	0·85	?

Hence in all these divisions (except the Central Provinces as in the North-Western Provinces the increased rain-fall was due to slightly heavier and much more frequent rain than usual.

5th.—The rainfall of the period was in slight to moderate excess in the Konkan, Bombay Deccan, Hyderabad and North and Central Madras :—

Division.	Rainfall during period, June to October.			Number of rainy days during period, June to October.		
	Average actual, 1894.	Average normal.	Variation from normal.	Average actual, 1894.	Average normal.	Variation from normal.
	Inches.	Inches.	Inches.			
Konkan . . .	113·22	111·86	+1·36	102·6	94·3	+8·3
Bombay Deccan .	32·42	31·61	+0·81	44·6	46·2	−1·6
Hyderabad . .	32·23	29·30	+2·94	46·7	?	?
Madras (North and Central).	39·23	35·20	+4·03	57·1	47·2	+9·9

6th.—It was on the other hand in moderate defect in Mysore, South Madras and probably Coorg, *e.g.* :—

Division.	Rainfall during period, June to October.			Number of rainy days during period, June to October.		
	Average actual, 1894.	Average normal.	Variation from normal.	Average actual, 1894.	Average normal.	Variation from normal.
	Inches.	Inches.	Inches.			
Mysore . .	22·10	25·93	−3·83	37·2	39·7	−2·5
Coorg . .	67·82	?	?	94·2	?	?
South Madras .	11·43	12·43	−1·00	17·7	19·5	−1·8

The deficiency in these areas was chiefly due to the fact that rain fell slightly less frequently than usual, as the average rainfall per rainy day was practically normal.

IV.—The retreating south-west monsoon period.—The rainfall during this period was very abnormal in its distribution. The rains ceased in Upper India (*i.e.*, Sind, the Punjab, and the greater part of Rajputana) in the fourth week of September. The Bay current was directed chiefly to North-Eastern India and Burma during the first fortnight of October. A storm advanced in the first week of the month from the Bay to the eastern districts of the North-Western Provinces, to which it gave an excessive burst of rain. The so-called north-east monsoon rains in the Madras Presidency were initiated by a storm which formed in the centre of the Bay, and advanced to the Coromandel coast during the third week of the month. A second cyclonic storm (part of the same general disturbance) formed in the Arabian Sea and advanced to the Kathiawar coast and Gujarat. The double disturbance gave a heavy and most abnormal and untimely precipitation to Central India, Kathiawar, Gujarat, the Central Provinces and the Gangetic Plain. The third and last cyclonic disturbance of the period formed in the Bay in the last week of October and advanced across the Madras Coast on the 2nd of November into the Deccan on the 3rd, partially filling up. The residual depression, like so many of the storms of the year, was thence determined to the eastern districts of the North-Western Provinces to which it gave an excessive and most untimely burst of rain. After the disappearance of this disturbance rain continued to fall in moderate amounts in Madras until the third week of November, and then decreased rapidly, due to the final withdrawal of the south-west monsoon current from the Bay. Light showers were occasionally received in the South Coromandel coast districts from north-east winds in December, but the rainfall was scanty.

Weather was in December unusually disturbed in Upper India. A series of feeble depressions of the cold weather type affected that area and gave moderate rain much earlier in the season than usual.

The following gives the more prominent features of the rainfall of the period, October to December :—

1st.—The rainfall in Madras and Mysore was in moderate defect. It was generally normal in amount in October and November, but was very deficient in December, and hence was

more or less in defect for the whole period. The following gives data :—

Division.	Variation of rainfall during October 1894.	November 1894.	December 1894.	Period October to December 1894.
	Inches.	Inches.	Inches.	Inches.
Madras (North)	+6·09	−0·71	−0·66	+4·72
Do. (Central)	+0·61	−0·59	−0·42	−0·40
East Coast (Central)	+1·55	−2·35	−2·34	−3·14
Do. (South)	−1·62	−1·83	−2·40	−5·85
Madras (South)	−0·15	+0·33	−2·06	−1·88
Do. (South Central)	+1·13	−1·63	−1·29	−1·79
Malabar	−2·90	−2·61	−0·72	−6·23
Mysore	+1·35	−1·63	−0·59	−0·87

2nd.—The rainfall of the period was in slight to moderate defect in Burma and Arakan, due to the earlier termination than usual of the rains in that area. The following gives comparative data :—

Division.	Variation of rainfall during October 1894.	November 1894.	December 1854.	Period October to December 1894.	Percentage variation during period.
	Inches.	Inches.	Inches.	Inches.	
Tenasserim	+5·74	−0·90	0	+4·84	+42
Lower Burma	−1·72	−2·44	−0·19	−4·35	−35
Central Do.	−1·37	−0·72	−0·08	−2·17	−25
Arakan	−0·77	−2·65	−0·17	−3·59	−26

3rd.—It was in moderate to large excess in Assam, Bengal, Bihar and Chota Nagpur, due to more frequent and abundant rainfall in these areas during the three cyclonic storms and disturbances of the period :—

Division.	Variation of rainfall during October 1894.	November 1894.	December 1894.	Period, October to December 1894.	Percentage variation during period.
	Inches.	Inches.	Inches.	Inches.	
Assam (Surma)	+14·60	+5·64	−0·61	+19·63	+262
Do. (Brahmaputra)	+6·97	+0·58	+0·52	+8·07	+171
Bengal (East)	+0·46	+2·16	+0·04	+2·66	+38
Do. (Deltaic)	+0·03	+4·65	−0·18	+4·50	+87
Do. (Central)	+1·40	+1·97	−0·14	+3·23	+75
Do. (North)	+4·75	+0·28	+0·14	+5·17	+98
Bihar (North)	+3·11	+0·80	−0·12	+3·79	+99
Do. (South)	+4·46	+1·25	−0·20	+5·51	+154
Chota Nagpur	+3·88	+0·67	−0·26	+4·29	+117
Orissa	+0·80	+1·71	−0·50	+2·01	+25

4th.—The total rainfall of the period was also in moderate to large excess in the Central Provinces, and Hyderabad, as is shown by the following :—

Division.	Variation of rainfall during October 1894.	November 1894.	December 1894.	Period October to December 1894.	Percentage variation during period.
	Inches.	Inches.	Inches.	Inches.	
Central Provinces (East)	+2·45	+0·93	−0·07	+3·31	+118
Do. (Central)	+2·94	+0·57	+0·12	+3·63	+142
Do. (West)	+3·01	+0·67	−0·27	+3·41	+115
Hyderabad	+0·21	+0·32	−0·49	+0·04	+1

4th.—The most remarkable feature of the period was the excessive rainfall over the North-Western Provinces, Bundlekhand and Baghelkhand. The following gives data :—

Division.	Variation of rainfall during October 1894.	November 1894.	December 1894.	Period October to December 1894.	Percentage variation during period.
	Inches.	Inches.	Inches.	Inches.	
Oudh (North)	+9·65	+2·11	+0·05	+11·81	+582
Do. (South)	+14·16	+2·83	+0·42	+17·41	+858
N.-W. Provinces (East)	+14·43	+1·14	+0·94	+15·61	+612
Do. (Central)	+10·15	+2·75	+0·66	+13·56	+904
Do. (West)	+0·96	+0·46	+1·46	+2·88	+291
Do. (Submontane)	+4·50	+1·30	+1·63	+7·43	+26
Bundelkhand	+6·46	+0·94	+0·53	+7·93	+484
Baghelkhand	+9·36	+0·86	+0·22	+10·44	+293

The abnormal character of the excessive precipitation in October and November is shown more fully by the comparative data of the following table for the districts in the North-Western Provinces in which it was most excessive:—

District or Collectorate.	Variation of rainfall during			Average normal rainfall, October and November.	Ratio of actual to normal during October and November.
	October 1894.	November 1894.	Period October and November 1894.		
	Inches.	Inches.	Inches.	Inches.	
Allahabad . . .	+18·08	+1·45	+19·53	2·03	10·6
Banda	+21·41	+4·57	+25·98	1·76	15·8
Fatehpur . . .	+22·33	+4·14	+26·47	1·30	21·4
Fyzabad . . .	+19·22	+1·52	+20·74	1·95	11·6
Sultanpur . . .	+25·37	+4·60	+29·97	2·13	15·1
Partabgarh . . .	+22·45	+2·78	+25·23	1·82	14·9
Jaunpur	+19·16	+0·75	+19·91	2·87	7·9
Azamgarh . . .	+15·85	+0·83	+16·68	4·30	2·5

The heaviest downpours were experienced at the stations for which data are given below :—

District.	Station.	Rainfall.				
		Average actual, October 1894.	Average actual, November 1894.	Average actual of period October and November 1894.	Average normal of period October and November.	Ratio of actual to normal during period.
		Inches.	Inches.	Inches.	Inches.	
Sultanpur . .	Kadipur . .	40·10	2·60	42·70	2·61	16·4
Fatehpur . .	Khakhreru .	33·04	2·90	35·94	1·49	24·1
Banda . . .	Kamasin . .	32·73	4·67	37·40	1·75	21·4
Fyzabad . .	Tanda . .	31·34	2·37	33·71	2·09	16·1

This rainfall was not only excessive but most untimely, occurring at a period when fine weather with clear skies is the rule and hence caused enormous injury to the crops.

5th.—The rainfall of the period was also in large excess in Gujarat, Kathiawar, Central India, East and South Rajputana, owing chiefly to the heavy rainfall in those areas during the second disturbance of the period. The following gives data :—

Division.	Rainfall.				
	Average actual, October 1894.	Average normal.	Average actual, October and November 1894.	Average normal, October and November.	Ratio of actual to normal during period, October and November.
	Inches.	Inches.	Inches.	Inches.	
Kathiawar . . .	2·98	0	2·98	0·92	3·2
Gujarat . . .	6·54	0	6·54	1·54	4·2
Central India . . .	5·61	0·53	6·14	2·11	2·9
Rajputana . . .	0·09	0	0·09	0·34	0·3

6th—The Punjab, Sind and Baluchistan obtained unusually early and frequent rain from cold weather storms in December, and the precipitation of the period was hence in excess over the greater part of that area.

Division.	Rainfall.					Variation from normal during period.
	October 1894.	November 1894.	December 1894.	Average actual, October to December 1894.	Average normal, October to December.	
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Punjab (South).	0	0·16	1·05	1·21	0·46	+0·75
Do. (Central)	0	0·54	2·02	2·56	0·68	+1·88
Do. (Submontane).	0·02	0·82	3·60	4·44	1·11	+3·33
Do. (Hill Districts).	0·52	2·21	7·55	10·28	2·50	+7·78
Do. (North-West).	0·04	0·05	0·68	0·77	1·51	−0·74
Do. (West) .	0	0	0·30	0·30	0·38	−0·08
Sind . .	0	0	0·09	0·09	0·16	−0·07
Baluchistan .	0	0·11	1·00	1·09	0·59	+0·50

Concluding Summary.

The large abnormal features of the meteorology of the year 1894 in India were very similar to those of the year 1893. The following gives the chief points of resemblance :—

1894.	1893.
The cold weather was somewhat more disturbed than usual and the rainfall in North-Western India above the normal. The snowfall was excessive in the higher Kashmir ranges, Ladakh and the Karakoram range.	The cold weather period was unusually stormy and the rainfall above the normal in North-Western India. There was heavier snowfall in the whole Himalayan area during the first three months of the year.
(2) March was slightly cooler than usual, and May warmer than usual, more especially in North-East India. Temperature was practically normal in April.	(2) March was unusually cool and April and May cooler in Northern and Central India.
(3) The rains commenced slightly earlier than usual on the Bengal coast, and were about four days later than usual on the Bombay coast. The monsoon currents advanced with unusual rapidity into Central and Upper India, and nearly the whole of India received favourable and abundant rain in June.	(3) The rains commenced at their normal date on the Bengal coast, and were a few days later than usual on the Bombay coast. They advanced even more rapidly than usual into the interior of Upper India, and the whole of India received abundant rain in June.
(4) The rainfall of the monsoon was normal or in excess over the whole of India with the exception of the Malabar districts, where there was a slight deficiency. It was in considerable to large excess in Sind, Gujarat, Kathiawar, the North-Western Provinces and Rajputana.	(4) The rainfall of the monsoon period was above the normal in all districts with the exception of Sind, and was unusually large in amount in the Punjab, the North-Western Provinces, Bihar and Rajputana.
(5) The Peninsula received favourable rain in October and November. The rainfall during these two months was excessive and unseasonable in the North-Western Provinces, Bihar, Baghelkhand and the northern districts of the Central Provinces and also in Gujarat, Kathiawar and Cutch. This excessive and untimely rain was due to the peculiar tracks of the cyclonic storms of the period.	(5) During the retreating south-west monsoon the whole of the Peninsula received abundant rain. The rainfall was large in amount and unseasonable in the Central Provinces and Berar. It was very heavy in the coast districts of Godavary, Kistna, Nellore, Tanjore and Trichinopoly, which received cyclonic downpours on more than one occasion.
(6) The south-west monsoon retreated earlier from the Bay than usual at the end of November.	(6) The south-west monsoon retreated earlier than usual from the Bay about the middle of December.
(7) The cold weather rains commenced unusually early in December.	

Cold weather period, January and February 1894.—The following table gives mean variation data of the more important meteorological elements for the cold weather months, January and February 1894 :—

Meteorological Province.	January and February 1894.						
	Variation from normal of mean monthly pressure.	Variation from normal of mean maximum temperature.	Variation from normal of mean minimum temperature.	Variation from normal of mean aqueous vapour pressure.	Variation from normal of mean humidity.	Variation from normal of mean cloud.	Variation from normal of average actual rainfall.
	"	°	°	"			
Burma Coast and Bay Islands.	—·023	+0·6	+1·7	+·014	—1	—0·3	—0·46
Assam . . .	—·015	+2·1	+1·1	+·035	+1	—0·9	+1·05
Bengal and Orissa .	—·009	+1·5	+1·6	+·012	—3	+0·1	—0·83
Gangetic Plain and Chota Nagpur.	—·009	+0·5	+3·1	+·066	+7	+0·9	+0·08
Upper Sub-Himalayas	+·007	—2·9	+2·8	+·062	+3	+1·8	+2·31
Indus Valley and North-West Rajputana.	+·008	—2·9	+1·1	+·033	+8	+1·2	+0·82
East Rajputana, Central India and Gujarat.	—·003	+0·1	+2·9	+·062	+10	+0·9	+0·46
Deccan . . .	—·005	+1·2	+2·6	+·039	+3	+0·2	+0·11
West Coast . .	—·010	+1·4	+0·7	—·002	—2	—0·5	+0·05
South India . .	—·009	—0·4	+0·1	+·027	+4	+0·2	+0·21

The following gives corresponding data for the month of December 1893, from which it will be seen to what

extent the abnormal features of the cold weather of 1894 were the continuation of corresponding features of the preceding month of December 1893 :—

Meteorological Province.	December 1893. Variation from normal of mean monthly pressure.	Variation from normal of mean maximum temperature.	Variation from normal of mean minimum temperature.	Variation from normal of mean aqueous vapour pressure.	Variation from normal of mean humidity.	Variation from normal of mean cloud.	Variation from normal of average actual rainfall.
	"	°	°	"			
Burma Coast and Bay Islands.	+·040	−2·7	−4·0	−·099	−6	−0·7	−1·02
Assam . . .	+·065	−1·5	−3·3	−·050	−3	−2·0	−0·43
Bengal and Orissa .	+·036	−0·1	+0·1	−·006	−2	−0·6	−0·32
Gangetic Plain and Chota Nagpur.	+·023	−0·1	+1·1	+·027	+3	−0·8	−0·29
Upper Sub-Himalayas	+·023	−0·1	+2·4	+·025	+5	+1·1	−0·38
Indus Valley and North-West Rajputana.	+·002	+2·0	+2·5	+·013	−2	+1·1	+0·26
East Rajputana, Central India and Gujarat.	+·024	+0·9	+2·1	+·030	+5	+0·2	−0·16
Deccan . . .	+·033	+0·2	+0·5	+·002	+3	−0·5	−0·58
West Coast . .	+·030	+1·0	−0·5	−·064	−8	+0·1	−0·86
South India . .	+·032	−0·3	−1·4	−·014	−1	−0·7	−1·61

The chief features of the meteorology of India during the cold weather period of 1894 were—

(1) Pressure was in slight general defect, the deficiency being most marked in North-Eastern India and Burma. It was in slight relative excess in Upper India.

(2) Temperature was above the normal over the whole of India with the exception of Upper India, where it was in slight to moderate defect. The excess in the remainder of India was greatest in Bengal, Assam and the Central Provinces.

(3) The mean absolute and relative humidities were both above the normal over the greater part of India. The air was slightly drier than usual in Bengal and Burma, but was abnormally damp in the Gangetic plain, the Punjab, Baluchistan, Sind, Rajputana and Central India.

(4) Cloud was in excess over the whole of India, except Burma, Assam and the West Coast districts. The excess was greatest in Upper India.

(5) The rainfall of the period was larger than usual in amount over the whole of India, except Burma and Bengal. The excess was large in the Punjab, Baluchistan and the mountain districts of Upper India.

(6) Abnormally heavy snowfall in the interior ranges of the Western Himalayas, Ladakh and the Karakoram range. A noteworthy feature of the snowfall of the period was the high limit of the snowfall line throughout the whole cold weather season.

Burma and North-Eastern India were characterized by much higher temperature, decreased humidity, less cloud than usual and frequent rainfall, and North-Western and Central India and the Deccan by increased humidity, cloud and rainfall.

A reference to the annual summary for the year 1893 shows that the meteorological conditions of the corresponding months of that year were similar to those of 1894, but were less marked. It may be also noted that the abnormal features of increased temperature, humidity and cloud over the greater part of India were the continuation of similar features and conditions in December 1893.

A comparison of the preceding data with those of the same period of 1893 shows that both periods were characterized by an excess of rainfall, and by increased humidity and cloud in North-Western India, and in these respects both seasons stood in marked contrast to the corresponding period of 1892, when the rainfall was very deficient in North-Western India, and the mean humidity and cloud were both largely below the average. The following gives comparative data for the three seasons for the area including the Punjab, North-Western Provinces, Rajputana and Bihar :—

Cold weather period of	Variation from normal in North-Western India of			
	Temperature.	Humidity.	Cloud.	Rainfall.
1894	+0·6	+10	+1·3	+0·92
1893	−4·2	+11	+1·4	+2·04
1892	+2·5	− 2	−0·2	−0·37

The rainfall in North-Western India was in much greater excess in 1893 than in 1894, and temperature was largely below the normal in the former year, whilst in the latter it varied, very slightly and somewhat irregularly, but was in small excess for the whole area. The mean rainfall, humidity and cloud variations in 1892 were opposite to those for the same periods of 1893 and 1894.

In each of these three seasons the humidity and cloud conditions and to a less extent the temperature conditions were related to the distribution of the rainfall, and hence also to the character and number of the cold weather

storms of the period. In the cold weather of 1891-92 there were fewer storms than usual, whereas in each of the corresponding periods of the years 1893 and 1894 there was a larger number of storms than usual. There were, however, characteristic differences between the storms of these two periods, which affected very considerably the precipitation. The cold weather storms in 1892-93 were well defined depressions, which gave snow down to unusually low elevations (down to 1,800 feet in the hills to the west of the Dera Ismail Khan district and to 2,000 feet in the Kurram valley and Hazara district, for example). The depressions in the cold weather period, 1893-94, were generally feeble, and diffused disturbances, and gave rain in the Himalayan mountain area to much higher levels than usual. Snow rarely fell below 4,000 or 5,000 feet. There was hence no large accumulation of snow in February and March on the plateaux of Baluchistan and Afghanistan or the lower mountain ranges of the Western Himalayas in the cold weather of 1894, such as there was in the corresponding months of 1893. This difference in the character of the precipitation of the two seasons at once explains the large deficiency of temperature in the cold weather of 1893, and the very slight deficiency in Upper India in the cold weather of 1894.

The pressure variations in Northern India in all three cold weather seasons were small in amount, and pressure was, in each, in slight general defect.

The mean pressure of the whole area in the cold weather period of 1891-92 was ·028″ below the normal, and the only important local feature was a slight deficiency of pressure in Assam. Pressure was in general defect in the cold weather of 1892-93, by amounts averaging ·018 inch, and was in slight relative excess in Northern India and in equally slight defect in Southern India and Burma. Pressure was ·005 inch below the normal in the cold weather of 1893-94, and was in slight relative excess in Northern India and in slight relative defect in Southern India, the Deccan and Burma. The abnormal pressure conditions at the level of the plains were hence very similar in character in these three cold weather periods, which, however, differed very largely in the distribution and character of the rainfall and other meteorological features.

These general pressure relations evidently throw no light upon the characteristic differences of the meteorology of the three periods. As stated in the annual summary for 1893 (page 573), the only feature of the pressure distribution in India, which throws some light upon the causes of the great variation from year to year in the character and number of the cold weather storms, is the relation between the pressure variations at the hill stations and the neighbouring plain stations, as indicating an abnormal excess or defect of pressure in the middle or higher atmospheric strata.

The following table gives vertical pressure anomalies for the cold weather period of 1893-94:—

Hill and Plain Stations.	Vertical pressure anomaly.						
	September 1893.	October 1893.	November 1893.	December 1893.	January 1894.	February 1894.	Mean of period, November 1893 to February 1894.
	"	"	"	"	"	"	"
Leh and Lahore	+·015	+·002	−·009	+·028	−·081	+·048	−·004
Quetta and Jacobabad	0	+·022	−·003	+·054	−·027	0	+·006
Murree and Rawalpindi.	−·014	−·004	−·016	+·016	−·049	+·002	−·012
Simla and Ludhiana	−·015	−·010	−·046	−·006	−·029	+·022	−·015
Chakata and Roorkee	+·003	−·016	−·038	−·024	−·012	+·035	−·010
Ranikhet and Bareilly	+·004?	+·014?	0 ?	+·004?	+·006?	+·034?	+·011?
Darjeeling and Dhubri	−·001	+·019	−·007	−·005	+·029	+·049	+·017
Mount Abu and Deesa	−·014	−·011	−·010	+·011	−·001	+·011	+·003
Pachmarhi and Hoshangabad.	+·038	+·036	+·043	+·008	?	+·046	?

The preceding table establishes that the vertical pressure anomalies in the cold weather of 1893-94 were negative, thus indicating deficient pressure in the middle atmospheric strata relative to the lower. This feature was slightly exhibited in the preceding months of September and October.

The relative deficiency was moderately large in January, moderate in November, and small in December. The mean for the whole period was small in amount, and hence indicated much less strongly marked abnormal conditions than those which obtained in the preceding cold weather of 1893.

The following table gives the mean vertical pressure anomalies for the cold weather period (*i.e.*, November to February,) of the year 1893-94 and of the corresponding period of the preceding four years for comparison:—

Pair of Stations.	Vertical pressure anomaly.				
	1893-94.	1892-93.	1891-92.	1890-91.	1889-90.
	"	"	"	"	"
Leh and Lahore	−·004	−·046	+·040	−·025	+·053
Quetta and Jacobabad	+·006	−·007	+·063	−·038	+·047
Murree and Rawalpindi	−·012	−·032	+·037	?	?
Simla and Ludhiana	−·015	−·049	+·017	−·020	+·037
Chakrata and Roorkee	−·010	−·022	+·039	+·015	+·077
Ranikhet and Bareilly	+·011?	+·013 ?	+·030	?	?
Darjeeling and Dhubri	+·017	−·008	+·026	−·004	+·039
Mount Abu and Deesa	+·003	?	+·027	+·016	?
Pachmarhi and Hoshangabad.	?	+·005	+·024	?	?

The meteorology of the cold weather of 1893-94 confirms the conclusions given in page 574 of the Annual Summary for the year 1893, *viz.*—

(1) Pressure is invariably in defect at the hill stations relatively to the adjacent plains in Northern India and hence in the middle atmospheric strata in Northern India, in cold weather seasons of abundant rainfall.

(2) Pressure is invariably in excess in the middle atmospheric strata over Northern India (*i.e.*, vertical pressure amomalies are positive) in cold weather seasons of deficient rainfall.

(3) The mean variations in the cold weather rainfall over Northern India from season to season are, roughly speaking, proportional to the magnitude of the vertical pressure anomalies of the period.

(4) The character of the vertical pressure anomalies during the cold weather and hence of the probable cold weather rainfall, are usually indicated in the preceding months of November and December, more especially when considered in combination with the character of the rainfall of the preceding south-west monsoon.

An examination of the Indian monsoon area charts and of the charts issued by the English Meteorological Office indicates that six of the seven cold weather storms which visited Northern India during the months of January and February 1894 originated in Persia, and the seventh storm in Baluchistan. Strongly marked anti-cyclonic conditions obtained in South East Russia and the eastern half of the Mediterranean during the inception of all these storms except one, thus confirming the conclusion stated in the Annual Summary for 1893 that the great majority of these storms originate in the plateau of Iran, and that the prevalence of anti-cyclonic conditions to the north and west is probably a predisposing and favourable condition to their formation and development.

Hot weather period, March to May 1894.— The following table gives the mean variation of the more important meteorological elements in the ten meteorological provinces of India for the hot weather period, March to May 1894 :—

Meteorological Province.	Hot weather, 1894. Variation of pressure from normal.	Variation from normal of maximum temperature.	Variation from normal of minimum temperature.	Variation from normal of aqueous vapour pressure.	Variation from normal of humidity.	Variation from normal of cloud.	Variation of average actual rainfall of period from normal.
	"	°	°	"			"
Burma Coast and Bay Islands.	−·028	−0·8	+0·6	+·001	+1	+1·0	+7·87
Assam . . .	−·040	−0·3	+0·3	+·005	0	−0·2	+1·58
Bengal and Orissa .	−·033	+0·8	+0·6	−·013	−4	+0·1	−2·05
Gangetic Plain and Chota Nagpur.	−·033	+0·4	+0·4	−·035	−3	−0·2	−2·14
Upper Sub-Himalayas	−·028	−0·5	0	−·008	0	−0·7	−0·15
Indus Valley and North-West Rajputana.	−·021	+0·7	0	−·003	−2	−0·8	+0·08
East Rajputana, Central India and Gujarat.	−·009	−0·1	−0·2	−·030	−2	−0·5	−0·28
Deccan . . .	−·009	−0·4	+0·4	+·003	0	+0·2	−1·07
West Coast . .	−·003	+0·3	+0·4	+·002	−1	−0·1	−2·30
South India . .	−·017	+0·1	+0·2	+·005	+2	+0·1	−0·73

The previous table shows clearly the chief features of the meteorology of the period. Pressure was in slight general defect throughout the whole period. The mean pressure of the whole of India averaged ·017″ in defect in March, ·019″ in April, and ·023″ in May, and hence ·020″ on the mean of the whole period. Relatively to the general conditions, pressure was, in March and April, locally in slight defect in the Peninsula and North-Eastern India, and in slight excess in North-Western India. The local anomalies in these months were, however, in all cases very small, and hence the chief feature of the pressure distribution in these months was its close approximation to the normal distribution in the plains of India.

The excessive temperature conditions of the month of May intensified very considerably the local pressure anomalies. The following gives the mean anomalies for each month of the period for the ten meteorological provinces :—

Meteorological Province.	Mean pressure variation from the normal in thousandths of an inch. March.	April.	May.
Burma Coast and Bay Islands . .	−·016	−·016	+·070
Assam	−·024	−·010	−·035
Bengal and Orissa	−·014	+·050	−·031
Gangetic Plain and Chota Nagpur .	−·030	+·030	−·039
Upper Sub-Himalayas . . .	+·070	+·030	−·035
Indus Valley and North-West Rajputana.	+·011	−·090	−·050
East Rajputana, Central India and Gujarat.	+·015	−·050	+·023
Deccan	+·090	+·020	+·021
West Coast	−·050	+·080	+·045
South India	−·080	0	+·016

The chief abnormal features of the pressure distribution of May were hence :—

(1) Very slight local excess in Burma.

(2) Large deficiency in Northern India averaging ·035″ in amount, and slightly greater in the Gangetic Plain (*i.e.*, the North-Western Provinces and Bihar) than elsewhere.

(3) Considerable to large local excess in Central India and the Peninsula, greatest in amount in the west coast districts.

(4) An important result of these abnormal features was to displace the hot weather trough of low pressure in May considerably further north than usual,—a condition which accompanied and favoured the abnormal extension of the westerly hot winds of the period into West Bengal.

The data of the preceding table show that the pressure anomalies in the plains of Northern India were largely modified by the excessive temperature, which prevailed throughout the month of May, more especially in North-Eastern and Central India and the Gangetic Plain. The excessive temperature was most marked in Bihar, Chota Nagpur and the north-eastern districts of the Central Provinces. The chief effect of the high temperature of May was to intensify the deficiency of pressure in North-Eastern India, which had been a persistent feature of the pressure distribution during the previous four months. A subsidiary but an invariable result of a large deficiency of pressure in North-Eastern India due to hot weather conditions in May, is increased pressure in Western India. The month of May 1894 was hence an example of this contrast between the pressure anomalies of Western and North-Eastern India due to excessive temperature in April or May in the Gangetic Plain or North-Eastern India.

The following table gives vertical pressure anomalies for each month of the period in Northern India, determined from the variation data of six pairs of stations. It will be seen they indicate that there was a moderate relative excess of pressure in the middle atmospheric strata :—

Pair of Stations.	Vertical pressure anomaly in		
	March 1894.	April 1894.	May 1894.
	″	″	″
Quetta and Jacobabad . . .	+·011	+·037	+·042
Leh and Lahore	—·013	+·046	+·082
Murree and Rawalpindi . . .	—·028	+·005	+·028
Simla and Ludhiana	—·022	+·023	+·050
Darjeeling and Calcutta . . .	+·006	+·018	+·009
Mount Abu and Deesa . . .	—·016	—·007	—·021

The preceding data show that pressure was in slight relative defect in March 1894, or the vertical anomalies were negative, accompanying slightly more disturbed weather than usual in Upper India and the Punjab Himalayas. The vertical anomalies were positive for the months of April and May and were large in the latter month.

The large positive pressure anomalies were evidently a result of the excessive temperature conditions of the month in Northern India, which by the various air movements, which it either strengthened or initiated, diminished pressure very largely at the level of the plains in Northern India and to a much smaller extent at the level of the hills, thus giving positive vertical pressure anomalies, the magnitude of which increased with elevation, and were hence greatest for Leh and Kailang.

The meteorology of the hot weather in India in 1894 was determined mainly, if not entirely, by the ordinary meteorological actions and conditions of the period, and by the distribution of the snowfall in the Himalayan area.

The winter snowfall ceased earlier than usual in March, and was excessive only on the higher elevations of the Western Himalayas. There was hence no large extension of snow-clad surface in that month. Temperature was slightly reduced below the normal in March, and was normal in April. Special conditions, which were not shown by the observations but which were almost certainly the continuation of those that gave decreased humidity and rain in Burma, Assam and East Bengal during the cold weather, reduced pressure considerably below the normal in that area. This local deficiency of pressure was not prominent in March and April, but it was undoubtedly related to the increased steadiness of the westerly winds in the Gangetic Plain in March and April, and their increased extension into West and Central Bengal. During the next month (May), when the hot weather actions were most vigorous, these conditions were largely intensified, and Assam, North and East Bengal were characterized throughout the month by large local deficiency of pressure. The local sea winds blowing across the Bengal coast were hence much stronger than usual, and gave frequent and heavy thunder showers in Assam and East Bengal, whilst the intensified westerly winds in the Gangetic Plain continued to affect West and Central Bengal and gave abnormally dry and hot weather in that area. The contrast of conditions between East and West Bengal in May was hence very striking.

South-west monsoon period, June to September 1894.—The meteorological conditions in the Indian land area antecedent to the establishment of the south-west monsoon were favourable to a strong monsoon, and also to its rapid extension to its limits in Upper India. The following gives the most prominent and important of these antecedent conditions :—

(1) The cold weather rainfall was heavier than usual in North-Western India, and the snowfall in moderate to large excess in the Punjab and Kashmir Himalayas. The snow line in the storms did not descend so low as in the winter of 1893, and the fall on the lower ranges was hence small in amount. The winter precipitation ceased earlier than usual, about the middle of March.

(2) The snow accumulation at the end of March was small in the lower ranges from 8,000 to 12,000 feet in elevation, and large on the highest ranges in the Punjab and Kashmir Himalayas. The winter accumulation melted very rapidly in April and May, and there was no unusual extension of snow-clad surface in April. Hence the temperature conditions of India in April and May were such as usually obtain after years of normal or deficient snowfall in the Western Himalayas.

(3) Ordinary hot weather temperature conditions hence obtained in March and April and strongly marked hot weather conditions in May. Temperature was largely in excess in the month of May in Northern and Central India, and more especially in Bihar, West Bengal and Chota Nagpur.

(4) The weather in Northern and Central India in May was characterized by excessive dryness and less cloud than usual, and by the abnormal prevalence of strong hot westerly land winds, and hence by more intense hot weather conditions than usual.

(5) Weather was finer and clearer than usual during the months of April and May in the Himalayan area, and the excessive snowfall in the winter months practically ceased to affect the temperature of the high level stations of Leh and Kailang at the end of March.

(6) Pressure was in moderate general defect over the Indian area during the whole period. The temperature conditions of May intensified the local pressure anomalies, which obtained in March and April, the chief feature in May being a large local deficiency in Northern India, greatest in the Gangetic Plain, and a large local excess in the western half of the peninsula, more especially the west coast districts.

The distribution of the snow accumulation with regard to elevation during the winter was evidently such as could produce no large effect on the temperature conditions in India at the commencement of the hot weather. The prevalence of even finer weather than usual over the Himalayan area in April and May favoured the rapid development of hot weather conditions in India during these months, and hence May 1894 was remarkable for the intensity of the hot weather over the greater part of Northern India.

There were slight indications in May of a stronger determination than usual of humid winds from the equatorial belt northwards to the Indian area, and more especially up the Bay of Bengal, and hence, in virtue of the strongly marked tendency for the monsoon currents to maintain the same general features (amidst a certain amount of oscillatory variation) throughout the whole season, there was a strongish probability based on these antecedent conditions and actions in April and May, that the monsoon currents would be stronger than usual, and that of the two branches of the monsoon current, the Bay of Bengal branch would probably be stronger relatively to the normal than the Bombay current.

The inference was in accordance with facts, as both currents, but more especially the Bengal current, were above their normal strength. The chief features establishing the increased intensity and volume of the currents were:—

1st.—The strength of the temporary and early advances of southerly humid winds in the Bay in April and May.

2nd.—The rapid extension of monsoon conditions in June over the whole of India.

3rd.—The increased strength of the lower air movement in India during the monsoon period, June to September, and more especially at the coast stations of the Bay of Bengal.

4th.—The absence of cyclonic storms in the Bay between July and the end of September.

5th.—The increased rainfall over nearly the whole of India, the excess, relatively to the normal precipitation of the period, increasing from the coast districts to the more distant interior districts, *viz.*, Rajputana, the North-Western Provinces and the Punjab.

The following gives a very brief summary of the chief features of the south-west monsoon currents and rainfall in 1894.

Temporary advances of south-west humid winds occurred earlier than usual in April and May. The first advance gave rise to a cyclonic storm in the last week of April, which advanced into Lower Burma and gave heavy rain.

The permanent advance occurred in the first week of June in the Arabian Sea. It was effected with unusual quickness, and did not give rise to a cyclonic storm in that area. Bombay and the Konkan coast districts received the first heavy burst of rain on the 7th and following days. The humid current advanced with greater rapidity than usual from the Bombay Coast across Central India and Rajputana, and was established over the whole area usually dependent on that current by the 10th of the month.

The permanent advance in the Bay occurred during the second week of June, and as usual a cyclonic storm formed in front of the advancing humid current. The storm crossed the north-west angle of the Bay and marched along a curved track to the Punjab. It initiated monsoon winds

and rainfall in the Gangetic plain and the south-west monsoon of 1894 was established over the whole of Northern India in the brief period from the 14th to the 17th June.

Both currents hence advanced much more rapidly than is usual from the coast districts to the interior of Upper India. They were stronger than usual during the remainder of June, in which month the whole of India, with the exception of Burma, Assam, North Bengal, the Deccan and South India received abundant rain. The south-west monsoon trough of low pressure during the month lay slightly further north than usual, stretching from the Orissa coast through Allahabad and Delhi to Dera Ismail Khan.

The chief feature of the monsoon of 1894 was a succession of four cyclonic storms, which formed in the north of the Bay, and advanced west by north across the head of the Peninsula towards Sind in the months of June and July. They were all of considerable intensity and varied largely in their rate of advance, and hence also in the distribution of rainfall accompanying them. During the first stages of their advance they were maintained chiefly by the humid current from the Bay, and in the later stages by indraught from the Arabian Sea current. The month of July was unusually disturbed, as each succeeding storm of the series formed rapidly before the preceding had broken up or disappeared in Baluchistan or the north of the Arabian Sea. The rainfall was largely in excess in the area directly affected by the storms, and was normal or in moderate excess in the remainder of India, except in South India, Malabar and Assam. The rainfall of the month was on the average of the whole of India in considerable excess. The trough of low pressure, more especially in its western half, occupied a slightly more southerly position than usual.

During the remaining two months of the period, fairly steady monsoon winds prevailed, and well distributed rain was received over the greater part of India. North Bengal, North Bihar and Hyderabad which had obtained scanty rain in the two previous months, received favourable rain in August and September.

The chief features of the rainfall of the whole period were as follows:—

(1) The rainfall was in excess over the Indian area. The excess for the period, June to September, averaged 2·66 inches, and for the period, June to October, 4·36 inches.

(2) Rainfall was largely in excess in certain districts, due chiefly to the cyclonic downpours they received from the July cyclonic storms, *viz.*, Sind, Gujarat, Kathiawar, Rajputana and Central India.

(3) Rainfall was largely in excess in the North-Western Provinces, Bihar and Chota Nagpur, due to more frequent and heavier rain than usual throughout the whole season.

(4) Rainfall was normal or in moderate excess in Bengal, Orissa and Burma.

(5) Rainfall was in moderate excess in the northern half of the Peninsula, *i.e.*, in Berar and the Central Provinces.

(6) Rainfall was normal or in slight defect in the southern half of the Peninsula.

It is evident that the combination of an unusually strong south-east trades circulation and the presence of favourable conditions in India during the hot weather months of April and May 1894 would account for the following features:—

(1) The early and strong temporary advances of southerly humid winds in April and May over the Bay area directed chiefly to Burma.

(2) The early permanent establishment of the monsoon currents over the Indian seas and the coast districts of India in the beginning of June.

(3) Their rapid extension over the Indian land area to the limits of the Punjab.

(4) The unusual strength and steadiness of the monsoon currents.

The pressure and other conditions antecedent to and during the rains explain several of the larger features of the distribution of the rainfall of the period, more especially the following:—

(1) Rainfall was normal or in slight defect over the greater part of the peninsula. The rainfall in the peninsula is usually inverse in character to that in Northern India, as larger indraught to one area necessarily implies decreased indraught to the other.

(2) Heavy rainfall along and near the hills in northern India. This was chiefly due to the position of the trough of low pressure.

(3) The slight deficiency in parts of Assam, East and North Bengal, was due to the abnormal determination of the Bengal current to the Gangetic Plain and Upper India.

(4) The excessive rainfall in the North-Western Provinces was an even more prominent feature of the months of October and November than of the south-west monsoon proper. The causes are stated on page 637.

(5) Another feature of the season was that the distribution of the rainfall of August and September was complementary to that of June and July, falling most largely in the first period where it was most deficient in the second period, thus giving a general favourable distribution of rainfall in Northern and Central India, such as was indicated by the pressure conditions in May.

The following gives a summary of the variation data of the elements of observation for the period :—

Meteorological Province.	Mean variation from normal during South-West Monsoon period June to September 1894 of							
	Mean pressure.	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud amount.	Total rainfall.
	Inches.	°	°	°	Inches.			Inches.
Burma Coast and Bay Islands.	—·015	—0·2	+0·3	+0·1	+·009	+1	+1·2	+9·35
Burma Inland .	—·021	—1·3	0	—0·7	?	?	?	+5·20
Assam . .	—·005	—0·7	—0·3	—0·5	+·001	+1	+0·3	+3·30
Bengal and Orissa . .	—·008	—0·7	—0·2	—0·5	—·015	—1	+0·7	+0·74
Gangetic Plain and Chota Nagpur.	—·010	—1·2	—0·5	—0·8	+·006	+2	+0·7	+7·64
Upper Sub-Himalayas.	—·012	—2·6	—0·3	—1·5	+·055	+9	+0·9	+6·43
Indus Valley and North-West Rajputana.	—·014	—0·6	0	—0·3	+·022	+2	+0·6	+3·72
East Rajputana, Central India and Gujarat.	—·016	—1·9	—0·4	—1·2	+·038	+6	+0·9	+6·60
Deccan . .	—·016	—0·9	0	—0·5	+·021	+4	+0·6	+2·13
West Coast .	—·017	+0·3	+0·3	+0·3	+·004	0	+0·4	—8·87
South India .	—0·20	+0·5	+0·3	+0·4	—·018	—3	+0·4	—2·48

The preceding data show that the rainfall was more or less in excess in all the meteorological divisions, with the exception of the west coast districts and South India, and as might be expected from the increased rainfall, the amount of cloud was in excess, the air was damper than usual, and temperature (more especially the day temperature) below the normal over the whole of India with the exception of South India and the West Coast.

In all these respects the south-west monsoon period of 1894 resembled the corresponding period of the preceding year, the only difference being that the variations were not so large or prominent as in that year.

An examination of the Indian monsoon charts for 1893 and 1894 indicates the probable general conditions and changes accompanying the advance of the monsoon currents over India. The following gives a statement of the more important facts :—

In the months of January and February north-east winds prevail steadily in the Indian seas and are continued across the Equator south and south-eastwards (as north and north-west winds) to about Lat. 8°S. or 10°S, where they are absorbed in the belt of calms and light variable winds, which separate the wind system of the north-east trades from that of the south-east trades of the Indian ocean. This belt of calms is transferred northwards in March and April, carrying with it the northern limit of the south-east trades, and in the month of April it lies over the Equator. The north-east winds to the north of the equatorial belt of calms and variable winds in January and February disappear in March, and are replaced by westerly winds which are at first light and unsteady, but gradually increase in strength and extend northwards. The large rainfall in the Nicobars, the Andamans and Tenassarim, and also in Travancore and Ceylon, in April, is mainly due to these westerly humid winds.

The equatorial belt of light variable winds hence serves as a reservoir into which the south-east trades are absorbed, and from which these westerly winds advance in April; but these two air currents are independent, so far that the latter is not the direct continuation of the former. A large change, however, occurs in the latter part of May, due to the increasing gradients in the Indian Ocean, as well as to the increasing gradients in the Indian area due to the increasing intensity of the hot weather conditions in that area. Pressure increases rather rapidly in the equatorial belt. The belt of calms and light variable winds contracts and finally vanishes, and the south-east trades advance as a horizontal current across the Equator, and are continued northwards as a massive humid current over the Indian seas. The burst of the monsoon is due to this important change over the equatorial belt.

The retreating south-west monsoon period (October to December 1894).—The general character of the pressure and other changes, which accompany the retreat of the south-west monsoon circulation from the Indian land area, was stated in pages 583-4 of the Annual Summary for the year 1893. The meteorology of the period, October to December 1894, is an interesting example of that statement and explanation given in last year's summary. As already stated the rains ceased earlier than usual in the second or third week of September in the Punjab and Rajputana. Pressure, however, did not rise so quickly as usual in September and October in Baluchistan and Upper India. The western extremity of the trough of low pressure was transferred from Sind and the South-East Punjab to the central and eastern districts of the North-Western Provinces. The first cyclonic storm of October advanced along the trough into the North-Western Provinces, and broke up there after giving a heavy downpour in the eastern and northern districts. In normal years the low pressure is usually transferred first eastwards into Bengal or Burma by rise of pressure in North-Western India and then south-wards into the Bay or the Madras coast districts by rise of pressure in North-Eastern India and Burma. The local pressure changes were much less marked than usual after the first storm in October. The rise in the North-Western Provinces was

smaller than usual, and the changes in Bengal and Burma were also less marked. Hence the chief feature of this period from the second week to the end of the month was a much greater uniformity of pressure than usual, and a marked local deficiency of pressure in the Gangetic Plain, Central India and the northern districts of the Central Provinces. Two cyclonic storms or disturbances formed in the Bay during this period. They advanced along the normal track of storms of the period, *viz.*, in a west-north-west direction to the North and Central Madras coast districts. Instead of completely breaking up against the East Ghats and other hills of the Peninsula they only filled up partially and then advanced northwards into the depression area in the Gangetic Plain, and gave heavy and most untimely downpours in that area. These very abnormal features of the pressure distribution continued until the breaking up of the storm of the last week of October and first week of November, when a rapid local rise of pressure in North-Western India established high pressure conditions. Dry weather with clear skies prevailed over the whole of Northern and Central India during the remainder of that month.

The most remarkable feature of this period from the beginning of October to the end of the first week of November was the excessive rainfall in the North-Western Provinces and Central India and the heavy rainfall in Bihar and the northern districts of the Central Provinces. Over a portion of that area including the eastern and central districts of the North-Western Provinces and in Oudh the rainfall was heavier than has ever occurred in that period so far as is shown by the available rainfall records. The following gives data for this area of excessive rainfall:—

Division.	Rainfall.			
	Actual, October 1894.	Actual, November 1894.	Total, October and November 1894.	Normal, October and November.
	Inches.	Inches.	Inches.	Inches.
Oudh, North . . .	11·26	2·15	13·41	1·65
Do., South . . .	15·76	2·85	18·61	1·62
North-Western Provinces, East.	16·61	1·25	17·86	2·29
Do. Central.	11·25	2·78	14·03	1·13
Bihar, North . . .	6·69	0·89	7·58	3·67
Do. South . . .	7·59	1·47	9·06	3·35
Baghelkhand . . .	11·59	1·43	13·02	2·86

The causes of the heavy localized rainfall in that area, so far as they are shown by the data, are the following:—

1st.—Persistent local deficiency of pressure in that area from the month of May to the end of the rains. The depression was very small in amount, but is clearly shown not merely by the monthly data for the period, but by the mean pressure data for the year. This deficient pressure was established during the period of excessive temperature in May over Bihar, Chota Nagpur and the eastern districts of the North-Western Provinces. One important result of this was to displace the trough of low pressure further north than usual, the axis stretching through the middle of the Gangetic Plain instead of along its southern edge as is usually the case. The trough of low pressure occupied during the greater part of the rainy season a more northerly position than usual, and that portion of it in the eastern districts of the North-Western Provinces was slightly deeper than usual, and hence formed a sink towards which the great majority of the cyclonic storms of the period drifted.

2nd.—The abnormal conditions stated in (1) explain in the first place why so large a number of the storms of the rains proper drifted from the Bay of Bengal to that area, and also why a considerable number redeveloped or intensified there due to the excessive local rainfall which followed their arrival in that area. As examples of this action may be mentioned the storm of the last week of the month of June and the first and third storms of the month of July.

3rd.—A comparison with the preceding year 1893 shows that similar pressure conditions (but less pronounced) obtained in the south-west monsoon period, and that there was a similar determination of the cyclonic storms of the rains to that area and hence more or less excessive rainfall.

4th.—The changes of pressure in North-Western India, which initiated the cold weather proper occurred more slowly and later than usual, and hence the abnormal pressure conditions, which had characterized that area during the rains, continued throughout the month of October, and were probably the chief factor in determining the march of the storms of that month to the Gangetic Plain.

If this be the correct explanation, the abnormal rainfall of the period in the Gangetic plain is an illustration of the very small pressure variations which frequently accompany and mark large local excess (or defect) of rainfall during the monsoon period.

Pressure increased considerably in North-Western India after the breaking up of the storm of the first week of November, and high pressure conditions were established in the second week of that month, and held steadily for some weeks. Pressure also increased locally in Burma and North-Eastern India in the third week of the month, and high pressure or north-east monsoon conditions were established in that area. Unusually dry and cool weather with strong northerly winds set in over Burma during the third week of the month. These conditions extended

westwards across the Bay, and began to affect the Coromandel coast districts in the fourth week of the month. The north-east winds due to these conditions gradually extended over the south of the Bay, and before the end of December had advanced southwards down to the equatorial belt, after which north-east monsoon conditions held steadily in the Bay. Weather was hence finer and drier throughout the month in Southern India. Little or no rain was received in the interior. Showers were of occasional occurrence in a narrow belt along the coast, which hence received moderate rain.

The south-west monsoon humid winds withdrew from the Bay somewhat earlier than usual, and the circumstances of their early withdrawal were, as shown later, almost identical with those which determined their early withdrawal in 1892 and 1893.

Weather was very disturbed in the Persian area in November, and more frequent and heavier rain fell in that area during that period than has occurred for many years. These conditions continued in December and extended across Baluchistan into Upper India, and frequent ill-defined disturbances gave unusual rain in the plains of Upper India, and heavy snow in the Kashmir and Punjab Himalayas. The Indian observations of the period throw no light upon the origin or cause of these abnormal conditions in the Persian area at this time.

The following table gives variation data of the ten meteorological provinces for the period October to December 1894 :—

Meteorological Provinces.	Variation from normal during the period October, November and December 1894 of							
	Mean pressure.	Mean maximum temperature	Mean minimum temperature.	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud.	Variation from normal of average actual rainfall.	Normal average rainfall.
	″	°	°	″			″	
Burma Coast and Bay Islands.	+·023	−0·1	−0·7	−·040	−3	+0·2	−4·80	14·69
Assam . .	+·001	−1·4	+1·0	+·024	+3	+0·5	+8·86	5·84
Bengal and Orissa	+·003	−0·9	+1·3	+·021	+1	+0·7	+3·09	6·09
Gangetic Plain and Chota Nagpur.	−·005	−1·7	+2·9	+·081	+8	+1·5	+8·36	3·06
Upper Sub-Himalayas.	−·007	−2·1	+2·4	+·039	+8	+1·4	+3·87	1·02
Indus Valley and North-West Rajputana.	−·004	−0·8	+0·4	−·036	−7	+0·4	−0·02	0·42
East Rajputana, Central India and Gujarat.	−·005	−1·6	+1·3	+·048	+7	+0·7	+3·78	1·06
Deccan . .	−·001	−0·6	+2·0	+·059	+8	+0·4	+1·36	4·32
West Coast .	+·011	−0·1	+0·2	−·011	−1	0	−2·81	12·01
South India .	+·009	+0·4	+0·1	−·005	−1	+0·1	−1·94	16·42

The preceding data indicate the chief features of the meteorological conditions of this period, which were as follows :—

1st.—The mean pressure for the whole of India was normal in amount. Pressure was in slight local excess in Southern India and the west coast and in moderate excess in Burma. It was in slight local defect in the Gangetic Plain, the Punjab, Rajputana and Central India.

2nd.—Rainfall was in moderate to large excess in the Gangetic Plain, the Punjab, Central India, Bengal and Assam. It was, on the other hand, in moderate defect in Burma and in slight defect in the west coast and Southern India.

3rd.—Cloud was in excess over the whole area except the west coast, where it was normal in average amount. The excess was large and marked in Chota Nagpur, the Gangetic Plain and Upper Sub-Himalayas (*i. e.*, the Punjab, except the western districts).

4th.—The air was damper and contained more aqueous vapour than usual over the whole of India, except (1) West Rajputana, Sind and the South and West Punjab, (2) Burma, and (3) South India and the west coast. The mean relative humidity was largely in excess in the Gangetic Plain and Sub-Himalayas, Central India and Gujarat and the Deccan.

5th.—The mean day or maximum temperature was below the normal over the whole area except South India and the mean night temperature above it over the whole area, except Burma. The variations were hence inverse, except in South India and Burma, and the mean temperature of the period hence differed very slightly from the normal. The variations of the maximum and minimum were greatest in Chota Nagpur, the Gangetic Plain and the Sub-Himalayas, and the mean diurnal range of the period was 4½° less than the normal in these districts.

The following gives variation data of ten meteorological provinces for the period, November and December

1894, for comparison with the data of the corresponding table on page 586 of the 1893 Annual Summary:—

Meteorological Province.	Variation from normal during the period November and December 1894 of						
	Mean pressure.	Mean maximum temperature.	Mean minimum temperature.	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud.	Average actual rainfall.
	"	°	°	"			"
Burma Coast and Bay Islands.	+·034	0	−1·1	−·059	− 5	−0·1	−4·00
Assam . . .	+·024	−1·4	+0·8	+·012	+ 3	0	+2·50
Bengal and Orissa .	+·024	−1·1	+1·1	+·016	+ 1	+0·2	+2·02
Gangetic Plain and Chota Nagpur.	+·017	−1·3	+2·8	+·067	+ 7	+0·8	+1·53
Upper Sub-Himalayas.	+·014	−3·3	+3·1	+·054	+12	+2·1	+3·33
Indus Valley and North-West Rajputana.	+·015	−1·4	+1·4	−·030	− 8	+0·8	+0·04
East Rajputana, Central India and Gujarat.	+·013	−1·7	+1·3	+·051	+ 8	+0·7	+1·18
Deccan . . .	+·017	−0·2	+1·8	+·045	+ 7	−0·1	−0·01
West Coast . .	+·023	+0·3	+0·1	−·024	− 3	−0·5	−2·33
South India . .	+·026	+0·2	−0·1	−·006	− 1	−0·1	−3·00

The preceding data indicate that in this period, as for the longer period October to December, the mean maximum temperature was below the normal, the mean minimum temperature, the mean absolute and relative humidities, cloud and rainfall were in excess in Assam, Bengal, the Gangetic Plain, Sub-Himalayas, East Rajputana, Central India and the Deccan, and that these features were on the whole most pronounced in the Gangetic Plain and Sub-Himalayas. The relative and absolute humidity, and the amount of cloud and rainfall, were on the other hand below the normal in Burma, the West coast and Southern India.

The larger features of the meteorology of this period were hence very persistent. The only noteworthy difference between the mean data of the two periods is that pressure was in moderate general excess over the Indian area during the period November and December, and was normal on the mean of the period October to December due to the deficiency of pressure in October. The relative variations were, however, unchanged, for the column "Variation of mean pressure" shows that pressure was most largely in excess in November and December in Burma and South India, and was least in excess in the Gangetic Plain, Upper Sub-Himalayas, Rajputana and Central India. In other words, pressure was relatively in local excess in the former area and in local defect in the latter.

The following table giving the pressure anomalies of the eleven meteorological provinces in India for the months of September, October, November and December, illustrates the more important pressure conditions of the period:—

Meteorological Province.	Pressure Anomaly.					
	September.	October.	November.	December.	Mean of October to December.	Mean of November and December.
	"	"	"	"	"	
Burma Coast and Bay Islands	+·003	+·033	+·017	+·010	+·020	+·014
Burma Inland . . .	+·002	+·021	+·014	+·014	+·016	+·014
Assam	+0·19	−·013	+·006	+·001	−·002	+·004
Bengal and Orissa . .	+·012	−·004	+·004	+·002	+·001	+·003
Gangetic Plain and Chota Nagpur.	+·005	−·016	−·005	−·002	−·008	−·004
Upper Sub-Himalayas .	−·002	−·016	−·013	0	−·010	−·007
Indus Valley and North-West Rajputana.	+·001	−·008	−·013	+·001	−·007	−·006
East Rajputana, Central India and Gujarat.	−·004	−·006	+·001	−·017	−·007	−·008
Deccan . . .	−·008	−·004	+·003	−·011	−·004	−·004
West Coast . . .	0	+·020	0	+·005	+·008	+·003
South India . . .	−·009	+·010	+·001	+·009	+·007	+·005

The data of the preceding table show clearly the persistent excess of pressure during the whole period October to December in Burma, and (to a less extent) in Southern India, and the equally persistent deficiency in North-Western and Central India. It is also noteworthy that the local pressure variations or anomalies were generally opposite in character in September, and hence that the conditions which obtained in October and the following months were due to conditions and actions initiated in the latter part of September and in October.

The abnormal conditions established in Burma and Assam were apparently the extension of conditions in the large plateau area to the north. Similar conditions prevailed in the corresponding periods of 1892 and 1893. The following gives a comparison of the antecedent conditions in Burma and Assam during the three years:—

Assam.

Variation from normal of	1892.			1893.			1894.		
	Aug.	Sept.	Oct.	Aug.	Sept.	Oct.	Aug.	Sept.	Oct.
Mean monthly pressure.	+·031	−·029	−·021	+·010	−·012	−·005	−·016	+·001	−·046
Mean daily temperature.	− 1·2	+ 1·1	− 0·6	− 1·0	− 0·5	− 0·4	− 1·0	− 1·6	− 0·1
Mean humidity .	+ 2	− 2	0	+ 2	− 2	+ 2	+ 1	+ 3	+ 5
Mean cloud . .	+ 0·5	− 0·2	− 0·5	+ 0·1	− 0·6	+ 0·2	+ 0·6	+ 1·0	+ 1·4
Average actual rainfall.	+7·76	−1·42	+2·19	+3·49	−5·85	+1·97	+2·50	+7·17	+6·36

BURMA.

Variation from normal of	1892. Aug.	1892. Sept.	1892. Oct.	1893. Aug.	1893. Sept.	1893. Oct.	1894. Aug.	1894. Sept.	1894. Oct.
Mean monthly pressure.	+·021	−·016	−·011	−·014	−·023	−·012	−·025	−·015	0
Mean daily temperature.	+ 0·3	− 0·5	− 0·4	+ 0·4	− 0·6	− 1·2	+ 0·1	+ 0·5	− 0·3
Mean humidity .	− 3	− 1	− 1	− 1	+ 1	+ 1	+ 1	+ 1	0
Mean cloud .	+ 0·2	+ 0·8	− 0·2	+ 0·6	+ 1·1	+ 1·3	+ 0·6	+ 0·9	+ 0·4
Average actual rainfall.	−6·43	+0·81	+0·26	−0·47	+2·09	+3·20	+0·90	−0·12	−1·50

The following tables give a comparison of the same elements of observation for the months of November and December of the three years 1892, 1893 and 1894 :—

ASSAM.

Variation from normal of	1892. November.	1892. December.	1893. November.	1893. December.	1894. November.	1894. December.
Mean monthly pressure .	—·039	+·030	+·068	+·065	+·044	+·004
Mean daily temperature .	— 0·7	— 0·5	0	— 2·4	— 0·5	— 0·1
Mean humidity . . .	— 1	0	+ 2	— 3	+ 3	+ 2
Mean cloud	— 0·8	— 0·2	+ 0·1	— 2·0	0	0
Average actual rainfall . .	+1·29	—0·19	—0·40	—0·43	+2·42	+0·08

BURMA.

Variation from normal of	1892. November.	1892. December.	1893. November.	1893. December.	1894. November.	1894. December.
Mean monthly pressure .	−·035	+·045	+·058	+·040	+·055	+·013
Mean daily temperature .	0	— 2·4	— 0·9	— 3·5	— 1·0	— 0·2
Mean humidity . . .	0	— 5	— 2	— 6	— 5	— 4
Mean cloud . . .	+ 0·4	— 0·7	— 1·1	— 1·0	— 0·7	0
Average actual rainfall . .	—1·60	—0·36	—2·68	—0·31	—2·14	—0·15

The preceding data show fully the character of the important changes in progress in Assam and Burma in November and their influence on the meteorology of Southern India in December.

The data for Burma and the Bay area establish that north-east winds set in over the Eastern Peninsula and the Andaman Sea in the latter half of November. The south-west winds in the south of the Bay gave way rapidly in the last week of November and the first week of December, and north-east monsoon winds were apparently established over the whole of the Bay before the middle of that month.

The indications in Burma during November of the existence of an abnormally cool and dry north-east air current in that area were excessive pressure, great dryness of the air and deficient temperature, cloud and rainfall.

The rainfall due to the retreating south-west monsoon current in Southern India (the so-called north-east monsoon) ceased much earlier than usual; and was in December small in amount and confined to a narrow strip of the South Coromandel Coast. It also occurred during the periods, when the winds of the north-east monsoon proper were strongest, and hence when the anti-cyclonic or high pressure conditions in North-Western India were most strongly marked, and as these conditions were less pronounced in December 1894 than in the corresponding month of 1893 the rainfall in the former month in the South Coromandel Coast districts was less in amount than in the latter.

The year.—The following gives a tabular summary of the meteorological data of the year 1894 for the eleven meteorological provinces of India :—

Mean provincial meteorological data for the year 1894.

Province.	Bar. variation, 1894.	Mean maximum, 1894.	Variation, 1894.	Mean minimum.	Variation.	Mean daily temperature.	Variation.	Mean daily range.	Absolute range.	Mean monthly absolute range.	Rainfall.	Normal Rainfall.	Variation from normal.
Burma Coast and Bay Islands .	−·012	87·5	−0·2	72·8	+0·4	80·1	+0·1	14·7	39·2	22·9	153·07	116·86	+11·92
Burma Inland	−·006	88·1	−1·3	67·0	+0·3	77·6	−0·5	21·1	58·8	32·4	57·26	52·98	+ 7·21
Assam	−·013	82·6	−0·2	67·6	+0·4	75·2	+0·1	15·0	52·8	27·1	118·64	103·84	+14·80
Bengal and Orissa . . .	−·012	86·1	0	70·0	+0·7	78·1	+0·3	16·2	55·4	27·8	72·48	69·75	+ 0·94

Mean provincial meteorological data for the year 1894—continued.

Province.	Bar. variation, 1894.	Mean maximum, 1894.	Variation, 1894.	Mean minimum.	Variation.	Mean daily temperature.	Variation.	Mean daily range.	Absolute range.	Mean monthly absolute range.	Rainfall.	Normal Rainfall.	Variation from normal.
Gangetic Plain and Chota Nagpur.	−·015	87·3	−0·6	68·0	+1·2	77·7	+0·3	19.4	68·1	32·3	59·36	45·52	+14·00
Upper Sub-Himalayas . .	−·011	85·0	−2·1	63·4	+0·9	74·2	−0·6	21·6	74·1	36·9	52·82	39·96	+12·86
Indus Valley and North-Western Rajputana.	−·008	90·1	−0·7	65·3	+0·3	77·8	−0·2	25·0	79·0	41·7	15·56	10·16	+ 4·64
East Rajputana, Central India and Gujarat.	−·007	89·1	−1·0	66·9	+0·7	78·0	−0·2	22·1	66·8	35·9	39·93	32·36	+ 7·57
Deccan	−·009	89·8	−0·4	68·0	+1·0	78·9	+0·3	21·8	60·7	33·8	43·19	43·88	+ 2·54
West Coast	−·006	86·1	+0·4	74·4	+0·4	80·3	+0·4	11·7	30·1	19·5	91·06	104·55	−13·80
South India	−·009	89·4	+0·2	72·0	+0·2	80·7	+0·2	17·5	45·8	27·8	37·21	43·78	− 4·89
Mean of whole India from Table I.	−·010	87·4	−0·5	68·7	+0·6	78·1	0	18·7	57·3	30·7	67·33	60·33	+ 5·25
Mean of whole India from Table II.	−·012	87·4	−0·5	68·8	+0·7	77·2	+0·2	18·6	56·5	...	...	...	...

The mean 8 A.M. pressure of the year was in slight defect over the whole of India by amounts averaging ·010″. The deficiency was least in the west coast districts and greatest in the Gangetic Plain. The mean maximum temperature was normal or in defect in all the provinces except the west coast and Southern India. The deficiency was considerable in the Upper Sub-Himalayas (—2·1°). The mean night or minimum temperature was above the normal in all divisions. The excess was most marked in the Gangetic Plain (+1·2°) and the Deccan (+1·0). The mean temperature of the whole Indian land area was according to the data of Table I normal, and according to those of Table II, 0·2 in excess. The variations for the year were less than ½° in all divisions, except the Upper Sub-Himalayas (—0·6°) and perhaps Burma Inland (—0·5°). The year was more cloudy and damper than the normal. The most noteworthy feature of the year was the excessive rainfall. The mean for the whole of India was in excess in the first three divisions of the year, and the excess for the whole year (taking into consideration the areas represented by the rainfall stations) was 6·48 inches. The rainfall of the year was more or less considerably in excess in Northern and Central India. It was between 20 and 25 per cent. above the normal in Central India and Tenasserim, between 30 and 40 per cent. in the Punjab and between 40 and 50 per cent. in the North-Western Provinces, Gujarat and Sind. It was normal or in slight excess in the Peninsula.

Table

Abstract of observations taken at 8 A.M.

Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure at 8 A.M. in inches.							Temperature of Air.										
			Mean actual pressure (reduced to 32°.)	Variation from normal.	Mean pressure reduced to sea level and to constant gravity 45° Lat.	Highest pressure recorded during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Mean of 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Absolute range during year.	Mean monthly absolute range.
I.—Burma Coast and Bay Islands		...	...	−·012	...	...	...	...	...	...	87·5	−0·2	72·8	+0·4	80·1	+0·1	14·7	...	...	39·2	22·9
Bay Islands	Port Blair	61	29·841	?	29·832	30·009	29·648	·361	·170	80·4	86·8	?	77·2	?	82·0	?	9·5	96·3	70·0	26·3	16·7
Tenasserim	Mergui	96	·839	?	·868	·021	·664	·357	·172	78·3	87·2	?	71·7	?	79·5	?	15·5	91·5	60·2	34·9	24·7
	Tavoy	26	·916	?	·873	·118	·694	·424	·172	75·8	87·5	?	69·9	?	78·8	?	17·6	97·7	53·2	44·5	26·8
	Moulmein	94	(a) ·846	?	(a) ·878	·051	·622	·429	·189	75·9	88·2	+0·1	72·4	+0·3	80·3	+0·2	15·8	99·4	58·9	40·5	24·0
	Toungoo	181	·711	−·009	·837	29·967	·451	·516	·208	75·3	89·5	−0·6	70·7	+0·5	80·1	−0·1	18·7	104·7	50·1	54·6	28·2
Lower Burma	Rangoon	41	·864	−·015	·842	30·099	·510	·589	·213	75·6	89·7	+0·4	72·7	0	81·2	+0·2	17·0	102·6	57·2	45·4	24·6
	Bassein	27	·878	?	·840	·127	·609	·518	·202	76·2	88·2	+0·3	71·9	+0·1	80·1	+0·2	16·3	100·7	57·5	43·2	23·9
	Diamond Island	41	·859	−·011	·835	·085	·622	·463	·188	79·4	84·3	−1·3	76·7	+1·8	80·5	+0·3	7·6	90·6	70·9	19·7	13·7
Arakan	Akyab	20	·863	−·012	·826	·146	·550	·596	·220	75·6	85·9	−0·3	71·7	−0·5	78·8	−0·4	14·2	97·2	53·2	44·0	23·5
II.—Burma Inland		...	...	−·007	...	...	...	...	...	...	88·1	−1·3	67·0	+0·3	77·6	−0·5	21·1	...	...	58·8	32·4
Central Burma	Thayetmyo	134	·751	−·007	·828	·038	·487	·551	·220	75·9	91·1	−0·6	69·6	+0·1	80·4	−0·3	21·5	105·1	47·2	57·9	30·8
	Minbu	?	·718	?	?	·035	·451	·584	·232	76·1	93·1	?	70·2	?	81·7	?	22·9	108·6	50·0	58·6	33·4
	Yamethin	?	·221	?	?	29·479	28·963	·516	·215	75·2	92·1	?	69·0	?	80·6	?	23·1	106·1	46·1	60·0	34·4
	*Fort Stedman	?	26·952	?	?	27·201	26·704	·497	·202	69·3	85·0	?	63·1	?	74·1	?	21·8	100·1	40·1	60·0	32·9
Upper Burma	Mandalay	?	25·621	?	?	29·918	29·364	·554	·229	77·5	90·5	?	71·3	?	80·9	?	19·2	106·1	51·2	54·9	29·8
	Kindat	?	·513	?	P	·840	·210	·630	·257	71·3	85·5	−1·9	67·5	+0·4	76·5	−0·7	17·9	103·7	46·9	56·8	29·3
	Lashio	?	27·102	?	P	27·348	26·862	·486	·214	65·3	81·2	?	59·7	?	70·6	?	21·5	101·0	38·1	62·9	35·4
	Bhamo	?	29·498	?	P	29·829	29·204	·625	·230	70·4	86·3	?	65·5	?	75·9	?	20·9	100·0	40·9	59·1	33·0
III.—Assam		...	...	−·013	...	...	...	...	...	...	82·6	−0·2	67·6	+0·4	75·2	+0·1	15·0	...	...	52·8	27·1
Assam (Surma)	Silchar	104	·778	−·007	·835	30·127	·408	·719	·251	72·8	85·8	0	68·1	+0·6	77·0	+0·3	17·7	97·6	45·7	51·9	29·3
Brahmaputra	Sibsagar	333	·551	−·018	·847	29·960	·217	·743	·294	69·2	80·2	−1·2	66·1	+0·1	73·2	−0·6	14·1	96·2	43·1	53·1	26·9
	Dhubri	115	·712	−·013	·814	30·132	·404	·728	·289	71·3	81·9	+0·6	68·6	+0·4	75·3	+0·5	13·3	102·3	49·0	53·3	25·1
IV.—Bengal and Orissa		...	...	−·012	...	...	...	...	...	...	86·1	0	70·0	+0·7	78·1	+0·3	16·2	...	...	55·4	27·8
East Bengal	Chittagong	87	·788	−·008	·823	·111	·319	·792	·254	74·6	84·7	+0·3	69·5	0	77·1	+0·2	15·2	96·2	49·6	46·6	24·9
	Lungleh	?			Observations not recorded.					66·4	73·1	?	61·7	?	67·4	?	11·5	86·3	45·2	41·1	23·5
	Noakhali	43	·811	?	·802	·163	·407	·756	·257	75·2	84·3	?	69·4	?	76·9	?	15·0	97·0	46·6	51·0	25·9
	Comilla	36	·825	?	·809	·175	·444	·731	·259	74·8	85·9	?	68·8	?	77·4	?	17·1	99·8	46·6	53·2	28·3
	Sirajganj	49	·796	?	·795	·175	·417	·758	·269	73·7	85·3	?	68·3	?	76·8	?	16·9	102·3	44·5	57·8	28·6
	Narayanganj	26	·826	−·011	·798	·185	·439	·746	·267	75·1	86·0	−0·7	71·0	+0·6	78·5	−0·1	15·1	99·6	51·3	48·3	25·5
	Barisal	13	·833	−·012	·791	·196	·427	·769	·270	76·3	85·1	+0·1	70·8	+0·6	78·0	+0·4	14·4	98·3	50·0	48·3	25·0
	Mymensingh	59	·794	−·015	·805	·149	·441	·708	·260	72·8	84·2	−0·2	68·5	+0·6	76·4	+0·2	15·7	98·2	45·6	52·6	27·0
Deltaic Bengal	Faridpore	467	·814	?	·802	·182	·367	·815	·273	74·8	84·0	?	69·8	?	76·9	?	14·2	98·5	48·0	50·5	26·4
	Jessore	33	·809	−·015	·790	·183	·357	·826	·284	75·6	87·6	−0·3	68·7*	−0·3*	78·4*	−0·4*	17·3	105·5	47·8	57·7	29·0
	Calcutta	21	·820	−·013	·786	·209	·237	·972	·295	75·6	86·4	+0·1	71·0	+0·5	78·7	+0·3	15·4	104·9	50·2	54·7	27·7
	Saugor Islands	25	·817	−·010	·787	·199	·278	·921	·287	77·7	85·3	−0·1	74·2	+0·6	79·7	+0·3	11·1	97·2	52·2	45·0	22·6
	Krishnagar	47	·791	?	·787	·180	·326	·854	·285	75·7	88·1	?	69·3	?	78·7	?	18·8	105·2	46·0	59·2	30·9
	Midnapore	149	·699	?	·796	·092	·198	·894	·288	77·1	90·7	P	70·9	?	80·8	?	19·9	117·4	49·2	68·2	33·2
Central Bengal	Bankura	298	·513	?	·768	29·887	·027	·860	·279	75·6	89·6	?	70·5	?	80·1	?	19·1	117·1	48·3	68·8	31·7
	Raniganj	334	·502	?	·792	·900	·075	·825	·284	74·2	89·2	?	70·0	?	79·6	?	19·1	114·8	47·7	67·1	31·2

* Mean of 11 months.

(a) Mean of 10 months.

I.

at 199 stations in India, Burma, etc., in the year 1894.

Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity of year.	Mean vapour tension of year.	Mean cloud amount of year.	Rainfall. Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal of year.	Heaviest rainfall during year.	Station.	Meteorological Province or District.
																		153·07	131·47	+11·92		I.—Burma Coast and Bay Islands.	
28	29	49	29	29	24	80	71	28	7·6	7·4	+ 3	86	·888	6·2	128	P	P	117·79	116·98	+ 0·81	4·69	Port Blair.	Bay Islands.
...	78	27	30	26	38	44	38	84	1·5	1·8	−17	84	·810	5·2	147	P	P	172·06	163·10	+ 8·96	4·20	Mergui . .	Tenasserim.
313	8	12	5	1	4	12	1	8	2·0	P	P	86	·777	3·9	143	P	P	230·54	P	P	8·07	Tavoy.	
...	15	55	70	71	57	49	30	18	5·3	2·8	+89	87	·785	6·1	139	137·55	+1·45	221·69	181·34	+40·35	10·78	Moulmein.	
93	65	2	2	136	51	...	...	16	2·1	3·1	−32	87	·784	5·5	122	113·72	+8·28	83·87	79·77	+ 4·10	3·28	Toungoo.	
...	27	45	33	18	53	92	70	27	4·2	4·6	− 9	89	·798	5·1	126	119·16	+6·84	95·52	95·27	+ 0·25	2·87	Rangoon . .	Lower Burma.
75	13	39	20	25	51	48	19	75	4·5	3·7	+22	88	·810	4·5	134	130·36	+3·64	121·48	109·55	+11·93	4·60	Bassein.	
17	55	65	24	15	15	90	30	54	9·6	7·4	+30	80	·811	5·6	121	118·44	+2·56	134·48	118·66	+15·82	6·71	Diamond Island.	
4	123	101	48	17	57	7	4	4	3·7	3·2	+16	89	·803	5·2	130	119·91	+10·09	200·24	187·08	+13·16	7·29	Akyab . . .	Arakan.
																		57·26	52·98	+7·21		II.—Burma Inland.	
3	40	29	19	79	115	19	26	35	4·0	5·1	−22	78	·713	4·5	68	76·08	−8·08	34·82	37·67	− 2·85	2·44	Thayetmyo . .	Central Burma.
52	11	3	17	171	21	2	16	72	7·1	P	P	77	·714	1·6	58	P	P	29·41	P	P	2·01	Nimbu	
64	41	7	1	199	29	2	2	20	6·7	P	P	81	·711	2·7	86	P	P	42·32	P	P	3·50	Yamethin.	
216†	3	5	...	...	...	80	3	14	P	P	P	83	·615	4·9	98	P	P	52·33	P	P	2·90	Fort Stedman.*	
115	22	6	4	67	103	41	2	5	4·1	P	P	75	·720	4·4	74	P	P	49·69	P	P	4·36	Mandalay . .	Upper Burma.
216	17	4	6	19	12	11	40	40	1·3	P	P	92	·730	6·0	104	P	P	85·22	68·29	+17·27	4·55	Kindat.	
1	129	160	...	7	3	35	...	28	P	P	P	89	·578	5·6	110	P	P	68·56	P	P	4·14	Lashio.	
181	46	58	3	10	3	28	6	30	2·0	P	P	88	·682	5·4	110	P	P	95·73	P	P	3·93	Bhamo.	
																		118·64	103·84	+14·80		III.—Assam.	
300	2	9	26	8	5	6	4	4	2·5	2·7	− 7	90	·704	6·8	152	135·79	+16·21	176·74	126·46	+50·28	5·34	Silchar . .	Assam (Surma).
157	7	109	15	22	11	40	1	3	2·1	2·4	−13	95	·712	6·1	128	126·18	+1·82	97·02	92·61	+ 4·41	4·85	Sibsagar . .	Brahmaputra.
56	32	116	91	22	5	31	6	6	5·1	4·7	+ 9	88	·703	5·4	113	87·39	+25·61	82·16	92·46	−10·30	5·10	Dhubri.	
																		72·48	69·75	+0·94		IV.—Bengal and Orissa.	
18	35	95	62	94	44	7	4	6	4·8	5·1	− 6	89	·775	5·1	110	96·01	+13·99	109·39	95·09	+14·30	4·32	Chittagong .	East Bengal.
		Not recorded.							P	P	P	83	·551	P	162	P	P	140·59	P	P	4·90	Lungleh.	
...	53	60	72	77	36	45	9	13	4·7	P	P	90	·811	3·7	122	108·60	+13·40	130·22	121·57	+ 8·65	4·85	Noakhali.	
67	26	9	92	61	85	12	3	10	4·2	P	P	91	·810	4·7	109	101·66	+7·34	94·88	91·63	+ 3·25	5·52	Comilla.	
147	12	11	31	53	54	24	18	15	2·5	P	P	87	·748	5·3	83	76·30	+6·70	51·28	61·16	− 9·88	5·03	Sirajganj.	
32	32	21	44	83	54	27	14	27	5·5	4·5	+22	87	·785	5·5	108	89·49	+18·51	77·47	70·11	+ 7·36	3·70	Narayanganj.	
220	14	11	8	22	56	24	2	8	3·4	P	P	86*	·809*	5·5	105	102·35	+2·65	93·21	76·78	+15·95	5·90	Barisal	
52	17	53	99	97	16	11	10	10	3·5	P	P	89	·739	5·0	121	104·65	+16·35	95·92	84·99	+10·93	5·25	Mymensing.	
149	20	5	25	51	83	18	6	8	2·9	P	P	88	·790	4·0	108	88·80	+19·20	80·48	69·11	+11·37	5·57	Faridpur.	Deltaic Bengal.
104	18	3	21	88	64	25	12	29	3·0	3·2	− 7	87	·802	4·6	84	87·97	−3·97	57·70	65·03	− 7·33	4·35	Jessore.	
123	28	11	20	30	65	60	13	15	3·6	4·8	−25	85	·778	4·4	95	87·19	+7·81	48·66	61·20	−12·54	2·36	Calcutta.	
...	58	60	16	18	96	81	22	14	13·4	10·8	+24	87	·840	6·1	90	86·54	+3·46	76·02	74·50	+ 1·52	7·69	Saugor Island.	
15	17	14	52	50	86	37	52	42	4·9	P	P	79	·735	4·5	87	74·05	+12·95	57·51	53·86	+ 3·65	3·71	Krishnagar.	
40	83	43	4	39	83	47	1	25	4·0	P	P	75	·726	2·6	81	76·45	+4·55	44·00	56·03	−12·03	2·25	Midnapore.	
193	7	7	22	41	24	7	36	26	3·1	P	P	76	·697	4·1	83	82·80	+0·20	55·77	56·59	− 0·82	3·05	Bankura . .	Central Bengal.
92	38	27	21	44	27	28	26	61	3·3*	P	P	81	·705	3·0	91	72·85	+18·15	60·99	53·25	+ 7·74	4·89	Raniganj.	

* Mean of 11 months.

† Wind direction for 321 days

Table

Abstract of observations taken at 8 A.M.

Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure 8 A.M. in inches.							Temperature of Air.											
			Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea level and to constant gravity 45° Lat.	Highest pressure recorded during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Mean of 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Absolute range during year.	Mean monthly absolute range.
	Burdwan	99	29·738	−·016	29·785	30·126	29·256	·870	·287	75·3	88·5	−0·3	71·1	+0·7	79·8	+0·2	17·4	112·3	50·1	62·2	29·3
	Naya Dumka	489	·331	?	·785	29·744	28·910	·834	·280	74·8	87·7	?	68·9	?	78·3	?	18·8	114·7	45·3	69·4	31·3
	Berhampore	67	·774	−·013	·790	30·172	29·356	·816	·282	74·5	87·4	−0·2	70·6	+1·1	79·0	+0·5	16·8	112·7	50·2	62·5	28·6
	Rampur Boalia	70	·763	?	·784	·163	·351	·812	·279	75·9	86·2	?	69·7	?	78·0	?	16·6	105·0	46·0	58·4	28·5
	Malda*	72	·778	?	·804	·184	·331	·853	·283	74·1	87·5	?	67·4	?	77·5	?	20·1	112·5	42·5	70·0	32·6
	Bogra	61	·776	?	·790	·160	·418	·742	·255	74·1	86·2	+0·3	68·3	+0·6	77·3	+0·5	17·9	103·3	46·2	57·1	29·1
North Bengal	Dinajpur	123	·723	−·004	·803	·123	·332	·791	·283	72·8	85·1*	0	68·1	+1·3	76·5*	+0·7	17·3	102·6	45·0	57·6	28·5
	Rangur	123	·727	?	·807	·125	·368	·757	·286	72·7	85·1	?	67·2	?	76·2	?	17·9	100·7	42·4	58·3	28·8
	Jalpaiguri	284	·575	?	·823	29·976	·220	·756	·298	71·8	84·0	+0·3	66·6	+1·3	75·3	+0·8	17·4	98·4	44·6	53·8	28·6
Orissa	Balasore	56	·778	−·017	·781	30·171	·306	·865	·286	76·4	88·7	+0·9	71·2	+1·0	79·9	+1·0	17·5	111·0	48·9	62·1	30·2
	False Point	21	·828	−·008	·791	·197	·368	·829	·270	77·9	85·5	−0·4	72·6	+0·6	79·1	+0·1	12·9	99·5	50·0	49·5	24·5
	Cuttack	80	·757	−·017	·781	·127	·347	·780	·262	78·2	91·2	−0·2	73·4	+0·9	82·3	+0·4	17·8	111·3	52·6	5 8·7	29·5
	Shortt's Islands	?	·820	?	?	·172	·128	1·044	·307	79·9	85·3	?	75·9	?	80·6	?	9·4	95·6	63·1	32·5	19·3
	Puri	24	·823	?	·778	·197	·443	·754	·261	78·3	85·9	?	74·9	?	80·4	?	11·0	94·7	55·6	39·1	22·4
V.—Gangetic Plain and Chota-Nagpur.		...	...	−·015	...	...	...	...	...	...	87·3	−0·6	68·0	+1·2	77·7	+0·3	19·4	...	...	68·1	32·3
Chota Nagpur	Hazaribagh	2,007	27·809	−·018*	·778	28·150	27·441	·709	·246	72·2	84·6	+0·3	66·1	+0·8	75·4	+0·5	18·5	108·6	42·2	66·4	31·4
	Ranchi	2,128	·695	?	·779	·065	·306	·759	·241	72·0	83·8		65·8	?	74·9	?	18·0	107·5	44·4	63·1	30·1
	Daltonganj	730?		Observations not recorded.						73·1	88·9	?	67·1	?	78·0	?	21·8	114·7	40·5	74·2	36·5
	Chaibassa	760	29·057	−·012†	·773	29·435	28·607	·828	·268	76·1	89·7*	+1·3†	69·9	+1·2	79·6*	+1·3	20·4*	117·8	45·4	72·4	32·9
Behar, South	Gaya	375	·447	−·016	·782	·865	29·043	·822	·256	75·4	89·4	−0·5	69·4	+1·0	79·3	+0·3	20·0	114·1	47·4	66·7	32·6
	Dehri	351	·471	?	·782	·894	·100	·794	·262	77·7	88·6	?	70·3	?	79·5	?	18·4	114·5	49·0	65·5	31·0
	Patna	183	·645	−·020	·783	30·069	·223	·846	·275	75·3	87·2	−0·6	69·9	+1·6	78·6	+0·5	17·3	114·1	45·4	68·7	30·0
	Arrah	190	·628	?	·773	·055	·218	·837	·267	74·7	88·6	?	69·2	?	78·9	?	19·4	113·9	45·1	68·8	31·3
	Buxar	239	·583	?	·781	·003	·188	·815	·260	75·0	87·4	?	69·1	?	78·3	?	18·4	111·9	44·4	67·5	30·4
Behar, North	Purnea	125	·711	−·010	·793	·137	·301	·836	·299	72·5	86·3	−0·5	67·9	+1·9	77·1	+0·7	18·4	106·3	45·3	61·0	31·0
	Bhagalpur	160	·663	?	·778	·089	·240	·849	·288	75·0	87·5	?	68·0	?	77·8	?	19·5	111·8	46·0	65·8	31·2
	Darbhanga	166	·663	−·018	·786	·087	·258	·829	·285	73·5	85·7	+0·1	69·2	+0·6	77·5	+0·4	16·5	107·0	47·1	59·9	28·4
	Muzaffarpur	178	·654	?	·789	·078	·257	·821	·278	73·0	86·0	?	68·0	?	77·0	?	18·1	109·2	46·3	62·9	30·3
	Motihari	224	·602	?	·787	·028	·184	·844	·279	72·9	86·1	?	66·1	?	76·2	?	20·1	108·0	43·3	64·7	32·8
	Chapra	181	·648	?	·786	·062	·240	·822	·273	74·8	87·4	?	69·2	?	78·3	?	18·2	113·2	45·7	67·5	30·4
N.-W. Provinces (Eastern Districts).	Benares	267	·553	−·012	·782	29·961	·140	·821	·257	73·7	88·1	−1·5	67·8	+0·9	78·0	−0·3	20·3	114·8	44·5	70·3	33·4
	Allahabad	309	·505	−·017	·778	·911	·095	·816	·260	75·2	88·6	−1·3	68·3	+1·7	78·5	+0·2	20·3	114·2	43·9	70·3	33·8
N.-W. Provinces (East Submontane).	Gorakhpur	256	·558	−·013	·778	·967	·136	·831	·268	73·5	86·2	−1·8	68·0	+0·8	77·1	−0·5	18·2	112·4	45·3	67·1	30·3
Oudh, South	Lucknow	375	·451	−·008	·788	·866	·040	·826	·271	73·5	88·2	−1·5	66·2	+1·0	77·2	−0·3	21·9†	113·8	42·2	71·6	36·3
Oudh, North	Baraich	403	·412	?	·786	·790	28·989	·801	·277	72·9	87·0	?	67·9†	?	78·0†	?	20·2†	113·6	37·1	76·5	33·3†
N.-W. Provinces (Central).	Cawnpore	416	·398	?	·781	·795	29·016	·779	·258	74·1	87·9	?	66·7	?	77·3	?	21·2	113·9	41·0	72·9	35·7
	Mainpuri	516	·302	?	·783	·685	28·906	·779	·268	72·7	88·4	?	66·0	?	77·3	?	22·5	114·7	40·5	74·2	37·1
VI.—Upper Sub-Himalayas		...	...	−·011	...	...	...	...	...	...	85·0	−2·1	63·4	+0·9	74·2	−0·6	21·6	...	...	74·1	36·9
N.-W. Provinces (Submontane).	Bareilly	568	·237	−·007	·782	·644	·822	·822	·268	71·1	85·7	−1·8	65·6	+1·1	75·6	−0·4	20·2	111·9	41·7	70·2	33·4
	Dehra Dun	2,233	27·590	−·015	·807	27·921	27·240	·681	·255	66·3	80·0	−0·8	61·5	+0·6	70·7	−0·1	18·5	105·5	39·5	66·0	31·7

* Mean of 11 months. † Mean of 10 months.

I—*contd.*

at 199 stations in India, Burma, etc., in the year 1894—contd.

Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind velocity: Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M.: Mean humidity of year.	Mean vapour tension of year.	Mean cloud amount of year.	Rainfall: Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal of year.	Heaviest rainfall during year.	Station.	Meteorological Province or District.
71	44	22	29	34	54	55	21	35	2·9	3·3	−12	78	·714	4·8	87	78·00	+9·00	50·61	56·90	− 6·29	3·04	Burdwan,	
31	28	10	50	63	41	22	43	77	4·6	?	?	74	·660	3·1	91	79·41	+11·59	61·77	57·23	+ 4·54	3·28	Naya Dumka,	
56	15	11	60	33	64	53	35	38	3·0	3·5	−14	85	·753	5·1	80	77·93	+2·07	55·63	56·31	− 0·68	5·68	Berhampore,	
102	46	21	19	58	34	58	21	6	4·8	?	?	84	·785	3·4	87	74·56	+12·44	52·96	58·19	− 5·23	4·91	Rampur Boalia,	
18	6	16	4	90	24	73	7	91	3·0	?	?	81	·712	3·3	66	53·25	+12·75	50·46	44·07	+ 6·39	6·84	Malda†	
87	36	23	69	85	4	17	20	9	?	?	?	84	·735	3·5	87	81·63	+5·37	74·69	65·78	+ 8·62	4·96	Bogra,	
32	21	46	103	45	21	9	58	30	1·8	?	?	84	·706	4·4	80	77·10	+2·90	70·19	68·58	+ 1·57	5·00	Dinajpur	North Bengal.
41	23	59	117	58	26	17	18	2	2·4	?	?	87	·728	4·3	80	78·70	+1·30	65·58	82·81	−17·23	4·56	Rungpur,	
30	56	90	85	62	10	7	3	22	2·7	?	?	85	·688	5·3	108	103·89	+4·11	138·35	127·42	+10·16	5·25	Jalpaiguri,	
40	44	27	15	1	45	121	43	27	5·9	?	?	85	·798	2·6	83	84·60	−1·60	65·41	64·64	+ 0·77	7·00	Balasore	Orissa.
3	84	15	4	7	51	116	47	38	9·9	9·1	+ 9	85	·832	5·7	86	75·00	+11·00	65·11	68·10	− 2·99	4·59	False Point,	
155	6	25	9	2	38	91	31	8	3·0	2·9	+ 4	75	·742	3·9	66	75·35	−9·35	50·49	57·75	− 7·26	3·13	Cuttack,	
1	52	37	8	6	63	131	37	22	14·4	?	?	80	·830	3·4	65	?	?	53·16	?	?	4·70	Shortt's Islands,	
103	67	18	5	1	9	93	53	15	10·6	?	?	84	·832	4·1	73	67·55	+5·45	45·87	54·18	− 8·31	3·88	Puri,	
																		59·36	45·52	+14·00		**V.—Gangetic Plain and Chota-Nagpur.**	
40	30	10	28	32	56	55	58	56	8·1	6·8	+19	69	·546	4·9	91	75·64	+15·36	67·00	52·75	+14·25	3·82	Hazaribagh	Chota Nagpur.
117	18	10	15	14	27	76	41	47	6·1	?	?	71	·565	4·0	97	82·69	+14·31	69·34	55·61	+13·73	3·96	Ranchi	
1	41	22	39	23	19	85	56	79	4·1	?	?	75	·640	4·3	82	?	?	55·96	?	?	4·85	Daltonganj	
35	15	12	9	9	24	134	97	29	2·0	?	?	73	·658	4·9	74	77·21	−3·21	49·47	54·42	−4·95	2·70	Chaibassa‡	
...	9	12	102	34	71	39	78	20	6·2	2·5	+148	75	·680	4·0	77	56·18	+20·82	63·47	47·22	+16·25	4·59	Gaya	Behar, South.
9	1	12	58	41	49	118	55	21	8·1	?	?	71	·674	3·4	65	54·74	+10·26	68·76	43·11	+25·65	4·22	Dehri	
48	...	22	112	25	17	44	85	12	4·6	3·0	+53	75	·635	4·2	66	55·72	+10·28	62·13	46·25	+15·88	6·23	Patna	
3	36	54	37	45	21	45	76	48	3·0	?	?	78	·689	3·2	68	55·69	+12·31	53·94	41·94	+12·00	4·54	Arrah	
12	9	31	96	11	27	55	97	27	4·4	?	?	73	·646	3·7	69	53·95	+15·05	67·79	39·82	+27·97	6·14	Buxar	
54	14	59	113	27	6	30	40	22	4·5	2·4	+88	86	·708	2·8	79	70·37	+8·63	63·01	66·40	−3·39	4·05	Purnea	Behar, North.
130	5	18	44	71	21	36	29	11	2·7	?	?	77	·695	4·3	64	60·55	+3·45	52·40	44·84	+7·56	5·45	Bhagalpore	
43	8	17	103	86	11	33	44	20	4·4	3·8	+16	82	·695	3·5	64	60·17	+3·83	52·94	51·51	+1·43	6·04	Darbhanga	
61	...	19	101	79	...	31	54	19	4·4	?	?	86	·725	3·3	57	56·41	+0·59	41·38	48·26	−6·88	3·01	Muzaffarpore	
54	...	84	100	24	2	37	48	16	5·6	?	?	82	·697	3·4	71	53·13	+17·87	46·91	47·37	−0·46	2·64	Motihari	
46	8	17	83	50	11	56	72	22	4·9*	?	?	79	·698	4·5	67	51·35	+15·65	58·57	42·28	+16·29	2·93	Chapra	
136	4	36	44	14	19	71	37	4	3·7	3·9	− 5	80	·684	4·1	78	50·54	+27·46	62·62	39·43	+23·19	3·90	Benares	N.-W. Provinces (Eastern Districts).
49	21	38	53	22	16	38	71	57	4·9	2·8	+75	73	·639	4·6	72	48·47	+23·53	76·42	39·44	+36·98	6·87	Allahabad	
17	38	25	71	28	46	18	98	24	2·2*	2·5	−12	76	·656	3·2	74	52·29	+21·71	61·08	51·35	+9·73	8·61	Gorakhpur	N.-W. Provinces (East Submontane).
175	11	8	80	7	9	10	33	15	...	3·1	?	73	·613	4·3	69	46·83	+22·17	61·86	38·80	+23·06	5·16	Lucknow§	Oudh, South.
43	9	34	42	93	4	37	19	84	3·8	?	?	79	·664	2·7	64	?	?	65·69	40·94	+24·75	7·35	Bahraich	Oudh, North.
86	21	23	37	32	15	39	70	42	3·7	?	?	73	·630	3·2	72	41·4	+30·6	63·14	31·09	+32·05	5·36	Cawnpore	N.-W. Provinces (Central).
183	15	12	26	19	8	15	35	52	1·2	?	?	73	·601	4·2	49	?	?	42·06	33·09	+8·97	4·02	Mainpuri	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	52·82	39·96	+12·86	...	**VI.—Upper Sub-Himalayas.**	
178	9	10	7	92	3	1	12	53	2·0	3·5	−43	74	·584	3·7	59	47·17	+11·83	68·50	49·61	+18·89	5·11	Bareilly	N.-W. Provinces (Submontane).
313	4	4	3	14	11	4	8	3	1·4	1·8	−22	75	·507	5·0	110	79·59	+30·41	122·65	87·98	+34·67	7·54	Dehra Dun.‖	

* Mean of 11 months. † Mean of 10 months. ‡ 30 Winds in December. § 21 Winds in October and 23 winds in November. ‖ 26 Winds in April.

Table

Abstract of observations taken at 8 A.M.

Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure 8 A.M., in inches.						Temperature of air.										
			Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea level and to constant gravity 45° Lat.	Highest pressure recorded during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Mean of 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Absolute range during year.	Mean monthly absolute range.
	Reorkee	887	28·911	−·015	29·786	29·301	28·500	·801	·266	69·2	85·3	−1·9	63·8	+1·3	74·6	−0·3	21·5	112·7	36·9	75·8	37·7
	Meerut	737	29·061	−·013	29·761	29·451	28·663	·788	·262	70·3	86·1	−1·6	64·3	+0·8	75·2	−0·4	21·9	111·9	40·1	71·8	36·7
Punjab, Central	Delhi	718	29·089	−·007	29·784	29·477	28·713	·764	·267	72·3	86·5	−2·7	67·5	+0·4	77·0	−1·2	19·0	113·5	44·1	69·4	33·4
	Lahore	702	29·090	−·015	29·778	29·514	28·615	·899	·313	70·3	86·6	−2·1	63·6	+2·3	75·1	+0·1	23·0	115·3	38·2	77·1	39·1
Punjab, Submontane.	Umballa	...	28·900	?	29·791	29·289	28·524	·765	·285	68·7	86·8	?	63·3	?	75·0	?	23·5	115·8	38·0	77·8	40·4
	Ludhiana	812	28·985	−·012	29·784	29·379	28·577	·802	·290	70·5	85·6	−3·1	64·2	+1·0	74·9	−1·0	21·4	115·8	38·9	76·9	37·3
Punjab, North	Sialkot	829	28·965	−·005	29·785	29·360	28·482	·878	·303	70·1	85·7	−1·8	63·1	+1·0	74·5	−0·4	22·6	114·9	36·3	78·6	38·8
	Rawalpindi	1,649	28·156	−·013	29·787	28·553	27·717	·836	·310	63·9	81·2	−2·9	57·2	0	69·2	−1·4	24·1	109·5	32·4	77·1	40·2
VII.—Indus Valley and North-West Rajputana.		...	...	−·008	...	...	...	...	...	...	90·1	−0·7	65·3	+0·3	77 8	−0·2	25·0	...	...	79·0	41·7
Punjab, West	Peshawar	1,110	28·728	−·007	29·799	29·163	28·266	·897	·334	67·4	84·6	−1·0	59·9	+1·1	72·3	+0·1	24·7	114·0	30·4	83·6	42·4
	Mardan	?	Observations not recorded.			...	...	...	...	66·9	87·9	?	58·8	?	73·4	?	29·1	115·4	29·0	86·4	44·1
	Khushab	612	29·176	?	29·770	29·638	28·741	·897	·317	71·5	88·4	?	63·9	?	76·2	?	24·4	117·1	35·1	82·0	42·3
	Montgomery	558	29·238	?	29·775	29·675	28·811	·864	·314	73·8	91·3	?	64·0	?	77·7	?	27·3	118·9	35·5	83·4	45·4
	D. I. Khan	573	29·221	?	29·783	29·680	28·759	·921	·332	68·1	89·1	−1·3	62·2	0	75·6	−0·7	26·9	117·1	33·0	84·1	44·1
	Mooltan	429	29·386	−·015	29·786	29·849	28·935	·914	·317	72·2	91·0	−0·2	66·1	+1·5	78·5	+0·7	24·9	115·5	37·6	77·9	40·8
	Sirsa	632	29·136	−·014	29·778	29·550	28·739	·811	·285	71·4	91·3	0	64·8	+1·4	78·1	+0·7	26·4	117·4	36·2	81·2	42·8
Sind and Cutch	Jacobabad	186	29·625	−·004	29·776	30·110	29·153	·957	·306	73·8	93·9	−0·3	66·4	+0·8	80·2	+0·3	27·5	121·0	32·5	88·5	48·4
	Hyderabad*	117	29·669	+·002	29·741	30·120	29·267	·853	·274	75·8	93·5	−1·7	70·7	−0·1	82·1	−0·9	22·8	113·2	42·5	70·7	40·0
	Kurrachee	49	29·810	−·007	29·811	30·230	29·338	·892	·273	73·7	86·2	−0·6	68·9	−0·7	77·6	−0·7	17·3	107·7	43·1	64·6	30·8
	Bhuj	395	29·459	−·011	29·813	29·770	28·892	·878	·240	75·2	90·1	−0·9	68·1	−0·5	79·1	−0·7	22·0	112·1	44·0	68·1	36·4
Rajputana, West	Bickaneer	753	29·057	?	29·782	29·473	28·611	·862	·288	74·1	91·3	−0·2	70·3†	−1·2†	81·7†	−0·6	22·9	114·4	42·6	71·8	38·6
	Pachpadra	380	29·445	?	29·789	29·879	29·049	·830	·373	72·9	93·2	?	64·3	?	78·7	?	28·9	119·5	35·0	84·5	45·9
VIII.—East Rajputana, Central India and Gujarat.		...	...	−·007	...	...	...	...	...	...	89·1	−1·0	66·9	+0·7	78·0	−0·2	22·1	...	...	66·8	35·9
Rajputana, East	Jeypere	1,431	28·406	−·012	29·816	28·762	27·997	·765	·256	72·4	89·3	−0·7	65·3	+0·7	77·3	0	24·5	112·3	40·2	72·1	39·4
	Sambhar	1,254	28·569	−·010	29·801	28·925	28·141	·784	·258	71·7	88·3	−0·4	64·3	−0·2	76·3	−0·3	24·0	109·0	40·0	69·0	39·1
	Ajmere	1,611	28·233	−·012	29·832	28·556	27·774	·782	·255	70·9	87·1	−1·4	65·2	+1·8	76·2	+0·2	21·9	107·9	39·4	68·5	36·8
	Deesa	466	29·392	−·008	29·823	29·710	28·883	·827	·235	74·4	92·7	−0·5	66·9	+0·1	79·8	−0·2	25·8	113·0	40·5	72·5	40·1
Kathiawar	Rajkot	429	29·444	−·003	29·832	29·733	29·000	·733	·220	75·4	91·5	−1·5	65·9	0	78·7	−0·8	25·6	112·4	43·0	69·4	39·7
	Veraval	?	29·866	?	29·826	30·121	29·494	·627	·205	75·9	84·7	?	71·1	?	77·9	?	13·6	101·6	52·3	49·3	26·3
Central India	Nowgong	757	29·068	−·018	29·794	29·436	28·668	·768	·249	73·3	88·0	−1·1	65·1†	+1·4†	76·1†	−0·1†	22·0†	113·6	39·6	74·0	35·4
	Indore	1,827	28·038	−·004	29·827	28·327	27·551	·776	·215	71·9	87·6†	−0·7	64·3	+0·8	76·5†	−0·1†	22·3†	107·1	42·6	64·5	35·6
	Neemuch	1,630	28·228	+·006	29·833	28·555	27·767	·788	·238	72·5	87·6	−0·0	64·5	+0·3	76·1	−0·3	23·1	108·1	41·0	67·1	36·6
Gujarat	Surat	36	29·851	−·007†	29·830	30·130	29·445	·685	·201	75·9	90·6	−0·7	69·7	+0·8	80·2	+0·1	20·9	108·6	52·1	56·5	32·7
	Ahmedabad	176	29·709	?	29·837	30·018	29·235	·783	·225	76·4	92·3	?	70·6	?	81·5	?	21·7	113·3	50·2	63·1	34·6
N.-W. P., West	Agra	555	29·264	?	29·790	29·671	28·883	·788	·258	73·5	89·1	−1·4	67·5	+0·2	78·3	−0·6	21·6	116·0	42·4	73·6	36·4
	Jhansi	840	28·981	−·003†	29·805	29·342	28·580	·762	·260	75·8	·6	−1·1	69·6	+1·4	79·6	+0·1	20·0	114·2	45·9	68·3	34·5
IX.—Deccan.		...	...	−·009	...	...	...	...	...	...	89·8	−0·4	68·0	+1·0	78·9	+0·3	21·8	...	...	60·7	33 8
Bombay Deccan	Belgaum	2,524	27·382	0	29·843	27·702	27·146	·556	·168	70·5	83·4	−0·9	64·0	+0·1	73·7	−0·4	19·4	97·3	53·4	43·9	29·0
	Sholapur	1,590	28·302	−·004	29·844	28·532	27·996	·536	·182	75·9	92·1	−0·5	68·3	+0·8	80·2	+0·2	23·8	108·7	52·1	56·6	34·1
	Poona	1,840	28·056	−·008	29·856	28·286	27·737	·549	·185	72·3	89·6	+0·9	65·0	0	77·3	+0·5	24·6	107·5	50·0	57·5	35·0
	Bijapur	1,946	27·950	?	29·843	28·163	27·693	·470	·177	73·9	89·5	?	66·8	?	78·2	?	22·7	105·3	48·1	57·2	34·1

* Mean of 10 months.

† Mean of 11 months.

I—*contd.*

***at 199 stations in India, Burma, etc., in the year 1894*—contd.**

Wind Direction. Number of winds from									Wind velocity.			Hygrometry 8 A.M.		Mean cloud amount of year.	Rainfall.						Station.	Meteorological Province or District.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity of year.	Mean vapour tension of year.		Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal of year.	Heaviest rainfall during year.		
214	8	4	21	57	16	5	5	35	2·9	2·5	+16	76	·561	4·0	73	46·57	+26·43	60·91	43·82	+17·09	3·21	Roorkee.	
174	2	7	47	17	1	20	79	18	1·7	2·2	−23	71	·542	3·8	59	39·18	+19·82	40·53	32·89	+ 7·64	4·62	Meerut.	
147	5	6	32	30	2	27	107	9	2·2	3·6	−39	64	·520	3·7	65	38·74	+31·26	41·11	30·03	+11·08	3·12	Delhi . . .	Punjab, Central.
122	5	16	45	58	16	8	41	22	2·5	2·5	0	69	·532	2·9	34	28·26	+5·74	23·19	21·95	+ 1·24	4·94	Lahore.	
184	...	4	5	85	...	1	1	85	1·8	?	?	85	·633	3·6	67	?	?	48·14	33·13	+15·01	3·08	Umballa . .	Punjab, Submontane.
180	10	19	3	68	19	15	14	37	1·8	1·5	+20	73	·563	4·4	55	37·00	+18·00	40·30	30·90	+ 9·40	4·28	Ludhiana.	
253	21	4	65	5	...	2	11	4	1·5	1·8	−17	69	·524	2·9	53	38·36	+14·64	40·64	34·12	+ 6·52	2·80	Sialkot . .	Punjab, North.
226	12	25	22	25	6	2	7	40	1·2	2·0	−40	77	·502	3·6	63	46·81	+16·19	42·18	35·17	+ 7·01	2·81	Rawalpindi.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15·56	10·16	+4·64	...	VII.—Indus Valley and North-West Rajputana.	
160	38	11	7	16	48	37	15	33	3·5	3·4	+ 3	65	·473	3·3	25	21·56	+3·44	10·44	13·54	− 3·10	1·13	Peshawar . .	Punjab, West.
?	?	?		Not	re	corded			?	?	?	?	?	?	35	?	?	24·67	?	?	1·96	Mardan.	
118	5	188	5	20	1	14	4	10	4·4	?	?	58	·471	2·4	32	16·40	+15·60	20·67	10·92	+ 9·75	2·90	Khushab.	
106	21	25	28	46	40	61	27	11	5·3	?	?	60	·519	2·5	22	15·70	+6·30	8·81	10·14	− 1·33	1·73	Montgomery.	
217	13	45	35	3	7	6	9	30	2·0	1·8	+11	69	·555	2·2	17	14·73	+2·27	11·57	8·42	+ 3·15	2·84	D. I. Khan.	
125	8	76	8	63	2	62	...	21	1·4	2·5	−44	65	·548	2·1	15	11·72	+3·28	7·85	7·56	+ 0·29	1·33	Mooltan.	
121	20	9	34	31	13	38	80	19	5·0	3·6	+39	63	·496	3·3	38	23·39	+14·61	20·99	15·55	+ 5·44	3·90	Sirsa.	
207	12	9	44	54	29	2	1	7	3·6	3·4	+ 6	57	·523	2·2	6	6·63	−0·63	1·59	4·08	− 2·49	0·32	Jacobabad . .	Sind and Cutch.
43	44	5	2	2	50	107	32	14	21·9	10·9	+101	63	·589	2·3	16	9·94	+6·06	10·83	7·00	+ 3·83	5·30	Hyderabad.	
2	38	101	19	1	..	89	100	14	11·2	13·2	−15	77	·686	4·3	16	9·73	+6·27	22·71	7·92	+14·79	4·78	Kurrachee.	
64	34	7	7	5	8	74	90	61	12·6	10·2	+23	65	·596	3·8	20	?	?	27·62	14·61	+13·01	4·70	Bhuj.	
25	32	28	14	14	58	113	27	54	5·8	4·8	+21	57	·514	3·1	21	?	?	12·20	11·95	+ 0·25	4·36	Bickaneer . .	Rajputana, West.
164	16	18	3	41	47	49	3	22	6·1	5·8	+ 5	65	·572	5·7*	33	?	?	22·38	10·28	+12·10	5·62	Pachpadra.	
...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	..	39·93	32·36	+ 7·57	...	VIII.—East Rajputana, Central India and Gujarat.	
86	19	30	13	11	15	68	80	43	3·5	5·1	−31	63	·523	3·9	50	38·70	+11·30	29·93	28·76	+ 1·17	2·05	Jeypore . .	Rajputana, East.
55	54	32	26	12	12	6	121	46	7·1	6·7	+ 6	61	·500	3·3	39	32·56	+ 6·44	26·62	22·91	+ 3·71	2·87	Sambhar.	
113	8	32	6	17	9	35	128	17	5·6	4·3	+30	67	·524	2·9	39	32·99	+ 6·01	26·99	22·18	+ 4·81	2·60	Ajmere.	
1	32	56	25	24	18	80	95	34	9·7	10·3	− 6	61	·547	3·8	36	28·81	+ 7·19	22·61	26·73	− 4·12	2·56	Deesa.	
32	35	48	35	2	3	42	118	50	8·7	9·2	− 5	67	·619	3·2	46	33·94	+12·06	49·16	28·67	+20·49	7·70	Rajkot . . .	Kathiawar.
70	70	46	3	6	5	35	99	31	6·2	?	?	74	·694	4·5	28	?	?	28·96	?	?	4·86	Veraval.	
71	28	17	22	5	13	71	116	22	3·4	2·5	+36	70	·566	4·3	62	49·75	+12·25	63·58	44·43	+19·15	9·29	Nowgong . .	Central India.
57	68	20	2	8	40	47	82	41	4·1	4·2	− 2	73	·588	3·8	55	48·00	+ 7·00	33·17	34·91	− 1·74	3·60	Indore.	
35	11	57	59	14	8	54	94	33	8·5	10·1	−16	61	·508	3·4	36	39·18	− 3·18	27·38	32·26	− 4·88	4·86	Neemuch.	
10	38	32	17	7	12	81	99	69	?	9·0	?	76	·704	3·4	60	49·36	+10·64	65·08	46·34	+18·74	10·12	Surat . . .	Gujarat.
42	41	60	35	16	7	52	43	47	4·9	?	?	65	·620	4·7	45	?	?	50·92	?	?	6·51	Ahmedabad.	
23	...	36	1	70	...	97	...	138	4·4	4·2	+ 5	65	·549	3·6	53	38·91	+14·09	35·76	29·12	+ 6·64	5·00	Agra.	N.-W. P., West.
67	31	27	3	17	22	104	26	68	2·9	3·4	−15	60	·539	3·0	67	49·07	+17·93	53·89	39·63	+19·26	4·04	Jhansi.	
...	...	....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	?	43·19	43·88	+ 2·54	...	IX.—Deccan.	
62	14	12	57	28	5	33	111	43	?	15·7	?	72	·548	4·9	78	63·08	− 5·08	49·66	48·74	+ 0·92	3·00	Belgaum . .	Bombay, Deccan.
9	24	18	40	61	9	51	58	84	12·5	8·9	+40	59	·525	4·4	36	51·01	−15·01	20·86	33·90	−13·04	3·11	Sholapur.	
99	3	6	30	16	4	52	108	47	9·0	10·0	−10	66	·531	4·1	49	49·36	− 0·36	26·73	28·74	− 2·01	2·10	Poona.	
7	5	21	39	51	7	61	109	65	7·2	?	?	71	·598	4·8	87	43·52	− 6·52	25·08	?	?	3·47	Bijapur.	

* Mean of 11 months.

Table

Abstract of observations taken at 8 A. M.

Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure 8 A.M. in inches.							Temperature of air.											
			Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea level and to constant gravity 45° Lat.	Highest pressure recorded during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Mean of 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Absolute range during year.	Mean monthly absolute range.
Khandesh	Malegaon	1,430	28·444	—·010	29·835	28·712	28·056	·656	·196	75·1	91·1	+0·1	66·0	+1·2	78·6	+0·6	25·2	109·3	47·5	61·8	37·7
	Ahmednagar	2,152	27·744	?	29·847	27·984	27·410	·574	·188	72·6	88·1	?	63·5	?	75·8	?	24·5	105·2	43·9	61·3	37·4
Berar	Akola	930	28·926	—·011	29·813	29·229	28·480	·749	·213	75·2	92·4	+0·2	68·1	+1·4	80·3	+0·8	24·3	113·1	46·7	66·4	37·4
	Amraoti	1,216	28·633	—·013†	29·812	28·915	28·210	·705	·213	75·2	90·6	−1·0	69·7	+1·5	80·2	+0·3	20·9	111·3	53·9	57·4	32·5
Central Provinces, West.	Khandwa	1,045	28·808	—·011	29·823	29·106	28·329	·777	·218	73·5	90·8	−0·4	67·9	+1·5	79·3	+0·6	22·9	111·7	44·1	67·6	36·9
	Hoshangabad	1,020	28·811†	?	29·801†	29·159	28·328	·831	·247†	74·5†	89·5†	−1·7†	69·1†	+1·2†	79·4†	−0·3†	20·4†	111·0	46·3	64·7	32·5†
	Nagpur	1,025	28·817	—·010	29·804	29·122	28·356	·766	·236	77·1	91·2	−0·5	69·2	+0·7	80·2	+0·1	21·9	115·4	47·2	68·2	35·0
Central Provinces, Central.	Chanda	634	29·216	—·010	29·804	29·519	28·794	·725	·225	75·7	92·4	−0·2	69·4	+0·9	80·9	+0·4	23·1	115·4	47·1	68·3	37·0
	Seoni	2,033	27·821	—·003	29·808	28·113	27·355	·758	·240	72·5	86·2	−1·3	65·1	+0·4	75·7	−0·5	21·1	108·2	44·0	64·2	33·4
	Jubbulpore	1,327	28·511	—·009	29·810	28·832	28·046	·786	·249	72·8	87·6	−0·5	65·5	+1·2	76·6	+0·4	22·1	110·5	40·9	69·6	36·0
	Saugor	1,762	28·075	—·005	29·806	28·393	27·631	·762	·235	72·2	87·2	−0·5	66·9	+1·4	77·1	+0·5	20·4	109·4	44·0	65·4	34·2
Central Provinces, East.	Raipur	970	28·868	—·006	29·795	29·193	28·408	·785	·247	76·6	90·4	+0·4	70·1	+1·2	80·3	+0·8	20·3	114·0	49·4	64·6	33·0
	Sutna	1,040	28·773	—·022	29·786	29·132	28·380	·752	·260	74·0	86·9	−0·9	67·3	+2·2	77·1	+0·7	19·6	112·1	41·2	70·9	34·1
	Sambalpur	463	29·359	—·010†	29·775	29·726	28·823	·903	·259	77·3	91·0	+0·1	70·9	+1.0	81·0	+0·6	20·0	116·5	46·7	69·8	32·2
Hyderabad, North.	Aurangabad	?	28·032	?	?	28·275	27·658	·617	·189	76·8	91·0	?	66·1	?	78·6	?	24·9	109·0	50·4	58·6	35·9
	Indur	?	Observations not recorded.							77·2	90·4	?	69·6	?	80·0	?	20·9	110·3	48·0	62·3	33·6
	Bidar	?	27·722	?	?	27·956	27·407	·549	·188	74·8	87·3	?	68·6	?	77·9	?	18·7	100·3	56·7	43·6	27·3
Hyderabad, South.	Gulbarga	1,502	28·377	?	29·833	28·637	28·081	·556	·186	75·6	91·5	?	68·7	?	80·1	?	22·8	109·1	53·1	56·0	33·1
	Raichur	1,378	28·509	?	29·826†	28·752	28·260	·492	·192	76·5	91·3	?	71·3	?	81·3	?	20·0	109·0	60·2	48·8	30·0
	Hyderabad (Dn.)	1,690	28·195	—·005*	·839	·446	27·905	·541	·195	74·5	89·4	−0·7	69·1	+1·1	79·3	+0·2	20·3	107·4	51·8	55·6	31·0
	Secunderabad	1,787	28·114	?	·857	·362	·827	·535	·192	73·6	90·3	?	68·6	?	79·4	?	21·7	107·8	52·1	55·7	33·1
	Khamamet	373	29·501	?	·790†	29·790	29·187	·603	·222	78·0	92·8	?	72·5	?	82·7	?	20·3	114·7	53·2	61·5	32·7
X.—West Coast.		...	...	−·006	...	...	...	...	...	...	86·1	+0·4	74·4	+0·4	80·3	+0·4	11·7	...	...	30·1	1·95
Konkan	Bombay	37	29·866	—·005	29·843	30·093	29·528	·565	·184	78·2	85·7	+0·1	75·0	+0·3	80·4	+0·3	10·7	93·0	64·0	29·0	18·2
	Ratnagiri	110	29·793	+·001†	29·842	29·995	29·525	·470	·174	78·9	87·4	0	73·7	+1·0	80·6	+0·5	13·7	97·4	62·4	35·0	22·5
	Mormugao	60	29·855	?	29·850	30·048	29·618	·430	·168	78·1	86·3	?	74·8	?	80·6	?	11·5	94·0	62·3	31·7	19·9
	Goa	23	29·914	+·007	29·851	30·124	·666	·458	·172	78·3	84·0	?	75·5	?	79·8	?	8·5	92·5	61·0	31·5	17·3
	Karwar	44	29·873	—·002	29·849	30·062	·677	·385	·161	76·1	86·6	+0·6	73·1	+0·6	79·9	+0·6	13·4	98·3	62·1	36·2	21·5
Malabar	Cochin	10	29·920	—·012	29·858	30·033	·790	·243	·133	78·5	88·0	+1·0	74·6	+0·1	81·3	+0·6	13·5	98·3	67·8	30·5	20·5
	Calicut	27	29·900	—·017	29·857	30·043	·762	·281	·140	78·3	86·4	?	73·8	?	80·1	?	12·6	92·8	65·1	27·7	19·7
	Mangalore	65	29·860	—·012	29·858	30·004	·711	·293	·141	70·2	87·1	+0·5	78·9	−0·1	80·5	+0·2	13·2	92·9	65·5	27·4	21·4
	Trivandrum	198	29·730	?	29·860	29·851	·596	·255	·132	77·8	83·6	?	75·3	?	79·5	?	8·3	90·0	68·0	22·0	14·3
XI.—South India.		...	...	−·009	...	...	...	...	...	...	89·4	+0·2	72·0	+0·2	80·7	+0·2	17·5	...	...	45·8	27·8
Madras, South	Pamban	37	29·871	?	29·835	30·036	29·690	·346	·144	81·5	87·0	?	78·0	?	82·5	?	9·0	93·8	69·2	24·6	17·5
	Tinnevelly	168	29·749	?	29·846	29·925	29·564	·361	·150	81·8	94·6	?	76·8	?	85·7	?	17·7	105·0	66·4	38·6	27·2
	Madura	447	29·456	—·011	29·840	29·626	29·272	·354	·149	80·2	93·9	−0·3	74·3	+0·7	84·1	+0·2	19·6	105·0	62·2	42·8	29·4
Madras, South Central.	Salem	940	28·994	—·014	29·876	29·182	28·813	·369	·153	77·9	93·1	+0·4	71·4	+1·1	82·2	+0·8	21·7	104·9	57·5	47·4	31·4
	Coimbatore	1,348	28·564	—·012	29·863	28·736	28·390	·346	·139	74·8	89·7	−0·4	69·0	−0·6	79·4	−0·5	20·8	98·4	58·6	39·8	29·1
Coorg	Mercara	3,781	26·229	—·001	?	26·367	26·095	·272	·143	65·2	75·3	−1·1	61·8	+0·7	68·6	−0·2	13·5	88·0	51·2	36·8	21·6
Mysore	Chitaldroog	2,405	27·517	?	29·853	27·712	27·305	·407	·163	73·2	86·0	?	66·9	?	76·5	?	19·1	98·2	52·9	45·3	29·4
	Bangalore	3,021	26·933	—·013	29·866	27·103	26·753	·350	·154	69·7	84·6	+0·7	64·0	+0.1	74·3	+0·4	20·6	96·8	51·9	44·9	30·1
	Hassan	3,091	26·880	?	29·879	27·043	26·723	·320	·145	70·2	82·0	?	62·0	?	72·0	?	19·9	94·0	47·0	47·0	30·2
	Mysore	2,518	27·431	?	29·883	27·593	27·280	·313	·155	71·4	85·9	?	65·3	?	75·7	?	20·6	95·9	52·9	43·0	29·6

* Mean of 10 months. † Mean of 11 months.

I—*contd.*

at 199 stations in India, Burma, etc., in the year 1894—contd.

Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry 8 A.M. Mean humidity of year.	Mean vapour tension of year.	Mean cloud amount of year.	Rainfall. Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal of year.	Heaviest rainfall during year.	Station.	Meteorological Province or District.
21	12	9	8	4	4	58	158	91	12·4	7·2	+72	70	·626	3·8	41	40·57	+0·43	28·46	25·60	+ 2·86	5·20	Malegaon. . .	Khandesh.
99	56	23	8	21	11	28	56	63	11·7	?	?	78	·643	3·5	43	?	?	25·82	?	?	2·90	Ahmednagar.	
56	12	18	39	16	9	25	146	44	7·0	5·5	+27	63	·551	3·2	43	50·58	−7·58	33·68	37·90	− 4·22	7·42	Akola . . .	Berar.
11	13	58	56	25	2	46	118	36	6·1	4·7	+30	63	·546	3·5	53	50·99	+2·01	41·12	37·41	+ 3·71	6·62	Amraoti.	
56	11	25	26	8	13	25	128	73	6·6	5·4	+22	67	·549	3·6	51	44·36	+6·64	40·10	33·29	+ 6·81	3·98	Khandwa . .	Central Provinces, West.
67	6	56	40	2	16	86	54	4	2·8†	3·0†	− 7	71†	·602†	4·7†	72	60·53	+11·47	61·53	56·58	+ 4·95	4·23	Hoshangabad.	
91	60	34	6	4	14	34	49	73	5·8	5·0	+16	64	·571	4·2	75	64·93	+10·07	56·56	50·91	+ 5·65	4·00	Nagpur.	
94	16	10	31	46	7	65	62	34	3·7	3·7	0	66	·582	4·0	67	?	?	53·24	58·53	− 5·29	4·15	Chanda . .	Central Provinces, Central.
				Not	recorded.	...			?	3·9	?	75	·608	4·1	87	73·65	+13·35	55·17	58·89	− 3·72	3·00	Seoni.	
88	17	19	3	51	49	40	77	21	2·8	3·3	−15	71	·565	4·1	74	65·62	+8·38	60·65	60·37	+ 0·28	3·55	Jubbulpore.	
92	16	39	17	34	18	72	63	14	3·9	3·5	+11	68	·533	3·4	78	56·93	+21·07	73·31	48·93	+24·38	4·36	Saugor.	
110	24	25	17	3	10	79	75	21	5·7	5·6	+ 2	67	·601	4·4	61	65·61	−4·61	51·82	52·52	+ 2·30	3·82	Raipur . . .	Central Provinces, East.
45	68	18	26	16	20	11	102	59	6·1	6·1	0	68	·566	3·4	73	52·91	+20·09	64·08	46·48	+17·60	8·25	Sutna.	
...	73	65	32	33	52	75	13	22	4·2	2·3	+83	72	·679	4·3	80	?	?	72·90	68·05	+ 4·85	5 25	Sambalpur.	
99	13	38	18	18	18	61	59	41	5·2	?	?	57	·524	3·6	50	?	?	32·00	32·27	− 0·27	3·12	Aurangabad . .	Hyderabad, North.
54	35	8	26	27	23	27	82	83	8·0	?	?	71	·654	4·0	67	?	?	52·05	37·40	+14·65	4·35	Indur.	
...	41	23	35	40	22	71	78	54	8·4	?	?	71	·605	2·8	53	?	?	34·99	42·04	− 7·05	3·07	Bidar.	
63	29	36	42	21	13	46	67	48	10·1	?	?	70	·627	4·5	56	?	?	30·38	29·19	+ 1·19	2·48	Gulbarga . .	Hyderabad, South.
...	10	23	34	52	44	48	102	52	8·8	?	?	65	·601	2·8	42	?	?	35·91	?	?	3·10	Raichur.	
105	10	11	17	28	11	2	128	52	5·9	?	?	72	·608	4·2	60	?	?	32·48	33·72	− 1·24	2·36	Hyderabad (Division).	
54	8	28	60	20	5	36	83	71	6·6	6·5	+ 2	69	·569	3·9	57	?	?	30·48	?	?	2·92	Secunderabad.	
167	19	1	1	52	34	12	54	25	6·4	?	?	78	·752	2·6	57	?	?	30·80	?	?	2·62	Khamamet.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	91·06	104·55	−13·80	...	**X.—West Coast.**	
10	39	72	62	24	24	38	73	23	10·9	12·2	−11	79	·780	4·4	82	76·63	+5·37	66·85	74·12	− 7·27	4·21	Bombay . .	Konkan.
31	34	31	28	70	35	49	22	54	5·7	10·2	−44	76	·755	4·4	98	97·80	+0·20	100·33	111·65	−11·32	3·52	Ratnagiri.	
7	60	20	46	65	15	6	50	96	9·5	?	?	83	·815	3 7	93	?	?	93·61	?	?	5·17	Mormugao.	
68	21	93	55	8	9	51	32	26	6·6	?	?	77	·761	4·5	92	?	?	84·50	103·32	−18·82	6·10	Goa.	
56	32	113	38	6	16	48	26	30	3·3	?	?	83	·751	3·9	100	109·07	−9·07	95·64	129·19	−33·55	6·28	Karwar.	
84	51	158	18	5	...	2	27	20	5·4	?	?	81	·801	4·2	133	132·16	+0·84	91·96	116·52	−24·56	4·21	Cochin . . .	Malabar.
98	31	60	96	29	3	2	11	35	11·1	?	?	83	·800	4·6	122	113·90	+8·10	116·30	113·13	+ 3·17	7·50	Calicut.	
78	26	38	124	39	3	8	20	29	2·5	3·4	− 27	80	·781	5·0	119	118·30	+0·70	129·84	122·74	+ 7·10	4·66	Mangalore.	
70	93	75	25	7	1	2	18	74	5·6	?	?	85	·812	5·1	83	?	?	40·52	65·69	−25·17	2·14	Trivandrum.	
...	...	...	..	...	...	...	...	...	...	...	...	...	..	...	...	...	...	37·21	43 78	−4·89	...	**XI.—South India.**	
2	40	61	42	28	54	89	40	8	11·4	?	?	81	·870	4·1	54	33·10	+20·90	32·09	37·00	− 4·91	3·88	Pamban . .	Madras, South.
3	72	21	4	4	3	39	75	144	6·8	?	?	67	·731	6·1	33	43·00	−10·00	19·52	?	?	3·24	Tinnevelly.	
37	102	53	9	14	3	14	13	120	2·6	4·2	−38	70	·732	3·6	53	43·71	+9·29	35·19	32·69	+ 2·50	4·22	Madura.	
120	15	48	8	12	60	79	17	6	3·9	4·4	−11	73	·605	4·3	64	66·50	−2·50	30·62	41·44	−10·82	2·72	Salem . . .	Madras, South Central.
...	43	23	87	15	114	74	9	...	3·7	4·8	−23	82	·708	4·6	38	45·20	−7·20	14·99	21·24	− 6·25	1·89	Coimbatore.	
...	50	52	68	10	5	14	72	94	7·9	5·8	+36	87	·552	6·2	145	137·20	+7·80	100·22	129·37	−29·15	4·67	Mercara . .	Coorg.
6	1	10	62	45	6	94	112	29	10·3	?	?	70	·573	5·1	46	?	?	22·24	?	?	3·24	Chitaldroog. . .	Mysore.
5	2	43	66	22	10	82	118	17	7·2	5·2	+38	80	·590	4·5	63	61·68	+1·32	32·21	35·86	− 3·65	2·38	Bangalore.	
57	6	27	55	25	6	28	112	49	3·7	?	?	78	·580	5·5	61	?	?	38·58	?	?	3·12	Hassan.	
34	9	46	57	7	11	96	94	11	11·5	?	?	81	·615	4·1	50	?	?	29·31	?	?	1·97	Mysore.	

† Mean of 11 months.

Table

Abstract of observations taken at 8 A. M.

Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure 8 A.M. in inches.							Temperature of air.										
			Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea level and to constant gravity 45° Lat.	Highest pressure reduced during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Mean 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during year.	Absolute range during year.	Mean monthly absolute range.
Madras, East-Coast, South.	Negapatam	31	29·855	−·011	29·815	30·059	29·689	·370	·154	81·5	90·5	+1·2	76·1	+0·5	83·3	+0·8	14·4	106·8	62·2	44·6	25·1
	Cuddalore	12	·890	?	·831	·094	668	·426	·167	80·4	89·7	?	74·3	?	82·0	?	15·4	106·3	55·8	50·5	25·8
	Trichinopoly	255	·653	−·013	·842	29·842	29·467	·375	·152	80·3	95·0	+1·0	74·5	+0·8	84·8	+0·9	20·5	106·7	60·4	46·3	30·5
	Madras	22	·876	−·016	·829	30·108	29·626	·482	·181	81·1	91·5	+0·7	74·8	+0·1	83·1	+0·4	16·7	110·0	61·0	49·0	27·8
Madras, East-Coast, Central.	Nellore	71	·812	?	·816	30·072	29·551	·521	·191	81·4	94·4	?	75·6	?	85·0	?	18·8	116·2	63·6	52·6	30·1
	Masulipatam	15	·866	−·004	·816	30·159	29·552	·607	·211	80·1	90·5	+0·2	74·3	+0·1	82·5	+0·2	16·2	114·7	59·7	55·0	30·1
Madras, Central	Cuddapah	433	·466	?	·841	29·717	·243	·474	·185	81·0	94·9	+0·6	74·4	+0·1	84·6	+0·4	20·5	111·3	59·3	52·0	32·1
	Kurnool	924	28·966	−·016†	·837	·209	28·718	·491	·185	77·5	93·1	−0·2	70·3	−0·2	81·7	−0·2	22·9†	110·3	49·7	60·6	34·6
	Bellary	1,475	·428	+·003*	29·853	28·655	·195	·460	·176	76·5	92·6†	−1·1†	70·5	+0·1	81·8†	−0·4†	21·5‡	105·0	56·1	48·9	32·0‡
Madras, East-Coast, North.	Rajahmundry	112	29·754	−·009	29·804	30·049	29·458	·591	·211	79·3	92·4	+0·3	74·1	+0·2	83·3	+0·2	18·3	114·1	57·9	56·2	30·6
	Cocanada	26	29·841	−·002	29·802	30·147	29·528	·619	·224	79·4	88·9	+1·2	74·6	−0·2	81·8	+0·5	14·4	109·3	59·6	49·7	27·4
	Vizagapatam	31	29·827	−·011	29·796	30·129	·508	·621	·231	80·9	85·4	?	79·0	−0·4	82·2	−0·2	6·4	95·8	65·0	30·8	14·3
	Gopalpur	21	29·825	?	29·785	30·184	·451	·733	·236	77·1	85·9	?	73·0	?	79·5	?	12·9	100·7	54·6	46·1	23·4
XII.—Hill Stations.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Baluchistan	Kachh*	?	23·927	?	?	24·150	23·650	·500	·222	55·9	69·8‡	?	38·1	?	54·8‡	?	30·0‡	97·0	11·0	86·0	50·0
	Pishin				Observations not recorded.						77·1	?	38·8	?	58·0	?	38·3	107·1	8·9	98·2	58·2
	Quetta	5,505	24·614	−·002	?	24·889	24·327	·562	·247	55·9	71·9	−1·4	43·9	−0·6	57·9	−1·0	28·0	97·1	14·8	82·3	46·7
	Kalat				Observations not recorded.					53·7	72·0	?	34·2	?	53·2	?	37·8	99·7	4·4	95·3	59·8
	Chaman	?	25·621†	?	?	25·929	25·329	·600	·277†	64·8*	77·5*	?	55·8†	?	67·8†	?	23·9†	106·5	20·6	85·9	44·1†
Northern India	Srinagar	5,204	24·869	?	?	25·200	24·504	·696	·325	51·0	64·2	?	44·6	?	54·4	?	19·6	89·3	19·1	70·2	35·0
	Gilgit	?	25·737	?	?	26·680	24·800	1·880	·497	59·3	76·1*	?	53·8	?	65·8*	?	20·7*	109·8	27·7	82·1	39·0*
	Cherat	?	25·653	?	?	25·960	25·275	·685	·273	61·5	72·3	?	56·1	?	64·2	?	16·2	105·5	29·1	76·4	34·8
	Murree	6,344	23·803	−·015	?	24·027	23·422	·605	·253	54·9	64·0	−1·7	51·2	+0·4	57·6	−0·7	12·9	92·2	24·5	67·7	32·1
	Poo	?				Not recorded.					60·4	?	41·2	?	50·8	?	19·2	87·8	12·2	75·6	34·3
	Simla	7,224	23·081	−·011	?	23·274	22·870	·404	·234	53·5	60·3	−2·7	49·9	−0·1	55·1	−1·5	10·4	83·4	28·0	55·4	24·2
	Chakrata	7,052	23·295	−·004*		23·518	23·088	·430	·232	54·5	63·0	−1·3	49·8	+0·3	56·4	−0·5	13·2	85·3	29·1	56·2	27·7
	Mussooree	?	23·530	?	?	23·746	23·311	·435	·232	55·1	62·6	?	50·9	?	56·8	?	11·7	87·8	30·5	57·3	24·8
	Ranikhet	6,069	24·077	+·001*	?	24·306	23·830	·476	·221	57·8	67·0	−0·7	53·5	+0·4	60·2	−0·2	13·5	88·6	32·5	56·1	27·2
	Gnatong	?				Not recorded				38·5	46·3	?	31·9	?	39·1	?	14·4	63·8	10·1	53·7	29·3
	Darjeeling	7,421	22·958	−·010	?	23·142	22·704	·438	·230	53·9	58·3	0	48·2	+1·3	53·3	+0·7	10·1	71·9	31·2	40·7	20·7
	Gantok	?	24·453	?	?	24·678	24·203	·475	·272	56·8	67·8	?	52·0	?	59·9	?	15·8	83·3	34·9	48·4	27·9
Central India	Mount Abu	3,945	26·013	−·017	?	26·288	25·576	·712	·218	66·7	74·2	−2·1	61·4	−0·4	67·8	−1·3	12·8	92·2	41·1	51·1	25·6
	Pachmarhi	3,528	26·428	+·002	?	26·686	25·973	·713	·219	70·4	79·2	+0·2	62·2	+1·3	70·7	+0·7	17·0	99·7	39·3	60·4	29·9
South India	Wellington	6,200	24·246	−·013	?	24·373	24·087	·286	·133	62·6	70·8*	+0·2	52·7	−1·1	61·8	−0·5	18·1	81·2	32·2	49·0	29·4
XIII.—Extra India		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ceylon	Colombo	40	29·900	−·008	29·866	30·015	29·765	·250	·130	82·6‡	86·4	?	75·3	?	80·9	?	11·1	92·0	66·0	26·0	18·1
Persia	Teheran	?	26·001	?	?	26·400	25·500	·900	·425	60·8	72·8	?	51·1	?	61·9	?	21·7	105·4	19·6	85·8	43·3
	Ispahan	?			Observations not recorded.					57·2	72·9	?	44·8	?	58·8	?	28·1	103·5	11·6	91·9	45·3
	Bushire	14	29·862	?	29·832	30·308	29·345	·963	·309	74·7	80·5	?	68·9	?	74·7	?	11·6	104·5	40·6	63·9	28·4
	Jask*	?	29·890†	?	?	30·378	29·349	1·029	·356	88·0	86·1	?	*72·9	?	79·4	?	13·4	105·2	46·3	58·9	26·7

* Mean of 11 months. † Mean of 10 months. ‡ Mean of 9 months.

I—*contd.*

at 199 stations in India, Burma, etc., in the year 1894—contd.

Wind direction. Number of winds from									Wind velocity.			Hygrometry 8 A.M.		Mean cloud amount of year.	Rainfall.						Heaviest rainfall during year.	Station.	Meteorological Province or District.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity of year.	Mean vapour tension of year.		Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal of year.			
46	16	47	11	9	19	76	92	49	9·6	5·6	+71	75	·802	5·5	53	60·74	−7·74	46·61	54·66	−8·05	4·04	Negapatam	Madras, East-Coast, South.
...	53	16	7	2	39	66	81	161	2·1	?	?	88	·911	3·7	62	56·80	+5·20	52·42	?	?	3·48	Cuddalore.	
106	28	40	5	4	2	55	105	22	4·4	5·8	−24	70	·723	4·8	46	45·45	+0·55	27·59	32·69	−5·10	3·51	Trichinopoly.	
15	47	27	16	12	58	89	74	32	6·6	7·1	−7	76	·804	5·0	63	60·53	+2·47	48·71	48·63	+0·08	3·70	Madras.	
62	14	1	1	22	57	13	71	124	6·5	?	?	77	·819	6·7	44	44·30	−0·30	32·50	?	?	3·50	Nellore	Madras, East-Coast, Central.
38	73	36	1	21	47	29	45	80	5·2	7·0	−26	81	·833	4·9	54	55·24	−1·24	38·97	43·52	−4·55	3·15	Masulipatam.	
2	9	20	40	74	21	54	74	71	?	?	?	68	·706	4·8	55	46·00	+9·00	38·46	34·18	+4·28	4·09	Cuddapah	Madras, Central.
187	6	11	29	6	8	22	68	28	?	?	?	67	·631	4·4	59	48·93	+10·07	31·26	30·06	+1·20	2·53	Kurnool.	
49	2	9	31	49	20	28	115	62	6·9	6·5	+6	64	·589	5·2	33	35·00	−2·00	19·83	19·73	+0·10	2·30	Bellary.	
34	105	27	38	19	8	14	70	50	?	?	?	73	·757	5·3	60	50·58	+9·42	42·82	41·48	+1·34	3·05	Rajahmundry	Madras, East-Coast, North.
4	90	31	7	7	1	85	75	65	7·7	?	?	79	·797	3·7	57	55·10	+1·90	42·47	44·54	−2·07	3·89	Cocanada.	
...	30	12	7	1	3	40	242	30	1·4	2·8	−50	74	·791	4·9	54	64·36	−10·36	43·40	46·47	−3·07	8·73	Vizagapatam.	
19	77	3	1	2	35	120	19	89	12·5	9·6	+30	84	·787	1·9	66	61·35	+4·65	35·75	50·72	−14·97	3·30	Gopalpur.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	**XII.—Hill Stations.**	
50	13	3	47	12	6	16	87	83	?	?	?	48	·220	1·9	25	?	?	15·16	?	?	1·38	Kachh	Baluchistan.
			Not recorded.							?	?	?	?	?	*33	?	?	*16·82	?	?	1·51	Pishin.	
338	2	1	...	10	8	3	2	1	1·8	4·1	−56	60	·292	2·3	37	22·45	+14·55	17·66	10·89	+6·77	1·43	Quetta.	
...	82	...	7	...	243	3	3	27	?	?	?	?	?	?	29	?	?	12·55	?	?	1·21	Kalat.	
§89	8	8	23	65	34	75	24	6	*7·1	?	?	*49	*260	*3·1	‡30	?	?	‡9·42	?	?	1·35	Chaman.	
148	27	20	18	62	56	3	14	17	4·0	?	?	89	·366	5·5	72	?	?	31·48	?	?	1·35	Srinagar	Northern India.
			Not recorded.						?	?	?	51	·273	4·9	20	?	?	6·18	?	?	0·94	Gilgit.	
81	126	3	6	60	13	6	6	64	13·5	?	?	58	·345	4·0	46	?	?	31·11	?	?	2·93	Cherat.	
51	28	29	32	102	10	15	11	87	9·2	6·8	+35	59	·274	4·6	103	67·56	+35·44	74·63	56·29	+18·34	5·53	Murree.	
231	9	10	20	33	12	14	19	16	?	?	?	?	?	4·6	64	?	?	25·65	?	?	2·12	Poo.	
1109	55	80	26	17	47	23	2	5	5·2	2·2	+136	62	·275	5·0	112	84·52	+27·48	109·71	64·19	+45·52	6·01	Simla.	
90	8	72	106	19	2	18	31	19	6·5	5·1	+27	69	·314	4·8	123	?	?	116·53	67·76	+48·77	5·14	Chakrata.	
12	38	60	83	28	12	13	42	77	?	?	?	72	·332	4·6	129	†79·73	†+40·27	131·73	?	?	5·54	Mussooree.	
237	10	32	10	9	4	35	19	9	2·7	2·1	+29	71	·358	4·7	108	77·29	+30·71	81·30	54·44	+26·86	7·21	Ranikhet.	
16	9	18	33	123	8	24	28	102	5·4	?	?	80	·204	4·8	195	?	?	151·28	?	?	3·85	Gnatong.	
62	13	60	83	25	15	36	47	24	5·3	4·1	+29	86	·358	6·6	139	118·14	+ 20·86	107·87	124·59	−16·72	3·56	Darjeeling.	
...	40	29	52	27	45	70	80	21	*1·5	?	?	87	·422	5·4	182	?	?	163·62	?	?	5·82	Gantok.	
31	19	61	6	21	11	145	40	31	9·2	7·0	+31	61	·395	3·7	68	53·19	+14·81	79·85	66·87	+12·98	619	Mount Abu	Central India.
46	10	19	35	22	21	55	125	32	7·1	5·2	+37	60	·433	4·3	95	80·37	+14·63	84·53	78·23	+6·30	7·68	Pachmarhi.	
224	11	27	18	9	11	35	20	10	2·7	3·3	−18	68	·393	4·6	87	88·63	−1·63	41·25	52·98	−11·73	2·24	Wellington	South India.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	−10·44	...	**XIII.—Extra India.**	
12	39	48	15	17	17	123	82	11	9·2	7·6	+21	75	·538	5·2	101	?	?	79·60	90·04	...	6·73	Colombo	Ceylon.
216	48	18	7	2	30	9	8	11	3·4	?	?	50	·261	2·2	37	?	?	10·53	?	?	0·92	Teheran.	Persia.
...	32	37	18	13	12	51	100	92	4·5	?	?	59	·277	2·0	15	?	?	5·72	?	?	1·31	Isphahan.	
...	28	103	35	77	1	9	1	105	5·9	8·2	−28	67	·603	?	33	?	?	26·61	13·34	+13·27	3·90	Bushire.	
6	47	39	48	59	37	25	26	32	13·1	?	?	65	·694	0·9	20	?	?	9·48	?	?	1·70	Jask.*	

* Mean of 11 months.
† Sum of 10 months.
‡ Sum of 11 months.
§ Wind observations of 332 days,
‖ " " of 364 "

Table

Abstract of observations taken at 8 A.M.

Meteorological Province or District.	Station.	Elevation of Bar Cistern above sea level in feet.	Pressure 8 A.M. in inches.							Temperature of air.											
			Mean actual pressure (reduced 32°).	Variation from normal.	Mean pressure reduced to sea level and to constant 45° Lat.	Highest pressure recorded during year.	Lowest pressure recorded during year.	Absolute range during year.	Mean monthly range of pressure.	Mean at 8 A.M. of year.	Mean maximum of year.	Variation from normal of year.	Mean minimum of year.	Variation from normal of year.	Mean daily temperature of year.	Variation from normal of year.	Mean daily range of temperature.	Highest temperature observed during year.	Lowest temperature observed during month.	Absolute range during year.	Mean monthly absolute range.
Arabia	Muscat	?	29·841	?	?	30·263	29·373	·890	·289	80·7	83·4	?	78·8	?	81·1	?	4·6	102·3	57·9	44·4	16·4
	Baghdad	?	29·475	?	?	29·948	28·978	·970	·356	66·1	82·5	?	60·6	?	71·5	?	21·9	113·9	24·0	89·9	39·0
	Aden	94	29·821	−·010	29·847	30·057	29·555	·502	·179	81·1	88·2	−0·6	78·0	+0·6	83·1	?	10·2	100·8	68·4	32·4	19·3
	Perim	?	29·660	?	?	29·905	29·392	·513	·175	83·0	89·7	?	79·5	?	84·6	?	10·2	99·4	68·9	30·5	16·5
Afghanistan	Kabul*	?				Not recorded.				53·8	71·1	?	44·1	?	57·6	?	27·1	98·4	5·4	93·0	46·4
Central Asia	Kashgar	?	25·692	?	?	26·270	25·230	1·040	·502	46·3	65·9	?	43·4	?	54·7	?	22·5	104·2	−2·7	106·9	45·8
Arabian Sea Islands.	Minicoy	10	29·939	?	29·874	30·039	29·813	·226	·139	80·9	87·1	?	79·1†	?	82·6†	?	7·1†	94·3	73·2	21·1	†14·0
Africa	Zanzibar	73	29·983	?	29·983	30·168	29·812	·356	·137	78·3	83·4	?	76·2	?	79·8	?	7·2	89·2	68·5	20·7	13·4

* Mean of 11 months.

† Mean of 7 months.

I—concld.

at 199 stations in India, Burma, etc., in the year 1894—concld.

Wind direction. Number of winds from: Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Wind velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry 8 A.M. Mean humidity of year.	Mean vapour tension of year.	Mean cloud amount of year.	Rainfall. Number of rainy days during year.	Normal number of rainy days during year.	Variation.	Rainfall of year.	Normal rainfall of year.	Variation from normal of year.	Heaviest rainfall during year.	Station.	Meteorological Province or District.
...	13	18	84	37	34	17	72	88	4·1†	?	?	69	·739	1·4	10	?	?	4·72	?	?	1·61	Muscat . .	Arabia.
133	91	33	14	15	19	15	6	39	(a)4·2	?	?	67	·423	0·8	34	?	?	22·31	?	?	6·23	Baghdad.	
80	4	73	127	21	15	31	3	1	10·8	11·5	—6	76	·803	3·7	5	?	?	3·41	3·79	−0·38	1·55	Aden.	
23	11	56	117	53	3	25	42	34	16.1	?	?	72	·809	3·8	9	?	?	0·66	?	?	0·24?	Perim.	
...	1	1	152	37	...	93	28	22	?	?	?	?	?	?	38	?	?	12·14	?	?	1·20	Kabul* . .	Afghanistan.
154	27	16	35	12	9	13	47	30	3·1	?	?	?	?	4·0	14	?	?	8·37	?	?	4·50	Kashgar . .	Central Asia.
21	41	45	21	10	1	20	134	65	12·5	?	?	81	·852	4·9	86	?	?	50·10	?	?	2·96	Minicoy . .	Arabian Sea Islands.
...	29	69	12	39	117	85	8	5	8·5	?	?	84	·821	5·5	90	?	?	39·63	?	?	2·86	Zanzibar . .	Africa.

Mean of 11 months. (a) Mean of 9 months † Mean of 10months.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M.

Meteorological Province.	Station.	Elevation of Bar-Cistern above sea level in feet.	Pressure.						Temperature of Air.									
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.
Burma Coast and Bay Islands.	Port Blair	...	29·853	29·758	·095	29·803	−·008	29·790	86·7	77·3	9·4	96·4	70·0	26·4	83·4	84·0	80·8	+0·2
	Rangoon	...	·874	·755	·119	·817	−·015	·795	89·7	72·7	17·0	102·6	57·0	45·6	81·5	85·2	79·0	+0·2
	Diamond Island	...	·875	·772	·103	·821	−·017	·797	84·2	76·7	7·5	90·6	70·8	19·8	81·5	81·0	79·4	+0·5
	Cocos Island	111	·826	·735	·091	·778	?	·824	85·5	76·3	9·2	91·6	69·9	21·7	82·3	81·9	79·5	?
	Akyab	...	·881	·773	·108	·827	−·010	·790	85·8	71·6	14·2	97·1	53·1	44·0	80·6	82·9	78·1	−0·4
Assam	Silchar	...	·787	·657	·130	·724	−·013	·779	95·8	68·1	17·7	97·4	45·7	51·7	77·8	83·1	75·9	+0·4
	Sibsagar	...	·565	·426	·139	·495	−·025	·788	80·8	66·1	14·7	96·3	43·1	53·2	73·8	80·0	72·4	+0·2
	Dhubri	...	·759	·624	·135	·690	−·016	·760	83·5	68·4	15·1	102·3	49·0	53·3	75·3	81·0	74·4	+0·2
Bengal and Orissa	Chittagong	...	·800	·693	·107	·747	−·011	·782	84·7	65·5	15·2	96·0	49·6	46·4	79·9	81·3	76·4	+0·1
	Narayanganj	...	·841	·722	·119	·782	−·010	·749	86·0	70·9	15·1	99·5	51·4	48·1	79·8	83·1	78·1	+0·3
	Calcutta (Alipore)	...	·834	·717	·117	·773	−·012	·739	86·4	71·0	15·4	105·1	50·1	55·0	80·6	84·1	78·2	+0·4
	Do. (Chowringhee)	...	·841	?	?	?	?	?	87·9	71·1	16·8	105·0	49·9	55·1	82·3	?	79·5	?
	Saugor Island	...	·832	·720	·112	·773	−·011	·742	85·3	74·1	11·2	97·1	52·3	44·8	81·6	82·7	78·6	+0·2
	Burdwan	...	·752	·626	·126	·686	−·018	·733	88·5	71·1	17·4	112·3	50·1	62·2	80·9	86·1	78·8	−0·2
	Berhampore	...	·785	·662	·123	·721	−·010	·736	87·4	70·6	16·8	112·5	50·2	62·3	80·4	85·4	78·1	0
	False Point	...	·842	·735	·107	·788	−·015	·750	85·5	72·5	13·0	99·3	50·1	49·2	82·4	82·6	77·8	+0·1
	Cuttack	...	·767	·646	·121	710	−·023	·732	91·2	73·4	17·8	111·1	52·5	58·6	84·0	88·4	80·8	+0·8
Gangetic Plain and Chota Nagpur.	Hazaribagh	...	27·829	27·726	·103	27·778	−·018	·715	84·6	66·1	18·5	108·7	42·2	66·5	78·0	81·2	74·4	+0·5
	Patna	...	29·657	29·539	·118	29·596	−·019	·732	87·1	69·9	17·2	113·9	45·4	68·5	80·9	85·2	77·7	+0·4
	Darbhanga	...	·682	·555	·127	·618	−·017	·738	85·7	69·2	16·5	107·0	47·1	59·9	79·2	84·3	76·8	+0·1
	Allahabad	...	·525	·410	·115	·463	−·017	·731	88·7	68·3	20·4	114·4	43·7	70·7	81·8	86·9	77·7	+0·1
	Ghazipur	220	·603	·489	·114	·543	−·022	·717	88·3	70 8	17·5	114·0	46·3	67·7	82·0	85·6	78·6	+1·9
	Lucknow	...	·472	·361	·111	·413	−·012	·739	88·2	66·3	21·9	114·0	42·2	71·8	81·0	85·7	76·9	−0·4
Upper Sub-Himalayas.	Dehra Dun	...	27·609	27·526	·083	27·558	−·015	·746	80·0	61·5	18·5	105·7	39·3	66·4	72·9	76·1	69·5	−0·9
	Dhera Forest School	...	·615	·530	·085	·573	?	?	80·9	60·2	20·7	?	?	?	74·0	77·6	69·7	?
	Roorkee	...	28·933	28·830	·103	28·874	−·007	·728	85·3	63·8	21·5	112·7	37·0	75·7	76·6	82·8	73·7	−0·4
	Meerut	...	29·083	·982	·101	29·025	−·015	·728	86·2	64·4	21·8	111·8	40·3	71·5	77·7	83·6	74·5	−0·5
	Lahore	...	·11C	29·024	·086	·060	−·013	·740	86·6	63·6	23·0	115·5	38·2	77 3	77·7	84·8	74·1	+0·7
	Ludhiana	...	·006	28·913	·093	28·952	−·013	·733	85·6	64·2	21·4	115·8	39·2	76·6	77·6	83 5	74·0	−0·2
Indus Valley and N.-W. Rajputana.	Peshawar	...	28·740	·640	·100	·683	−·009	·777	84·6	60·0	24·6	114·0	30·4	83·6	75·5	82 6	71·3	+0·7
	Mooltan	...	29·400	29·313	·087	29·349	−·006	·737	91·0	66·1	24·9	115·7	37·5	78·2	79·6	89·3	77·6	+1·4
	Jacobabad	...	·642	·526	·116	·577	−·006	·719	94·8	65·5	29·3	120·9	32·5	88·4	84·6	92·5	79·1	+0·4
	Kurrachee	...	·785	·705	·080	·745	?	·745	87·0	70·7	16·3	108·0	43·2	64·8	82·6	84·1	77·8	?
East Rajputana, Central India and Gujarat.	Jeypore	...	28·426	28·323	·103	28·369	−·007	·762	89·4	65·2	24·2	112·1	39·9	72·2	80·6	86·8	76·1	+0·1
	Ajmere	...	·230	·128	·102	·176	?	·731	87·1	65·3	21·8	107·9	39·4	68·5	78·6	85·8	75·6	+0·7
	Deesa	...	29·404	29·286	·118	29·341	−·007	·757	92·7	66·8	25·9	113·2	40·6	72·6	83·3	90·8	79·4	−0·4
	Nowgong	...	·078	28·969	·109	·020	−·018	·729	88·0	65·2	22·8	113·6	39·6	74·0	80·2	85·5	75·9	?
	Agra	...	·284	29·170	·114	·219	−·019	·731	89·1	67·5	21·6	116·2	42·5	73·7	81·5	86·9	77·8	−0·3
Deccan	Belgaum	...	27·389	27·284	·105	27·336	−·007	·754	83·5	64·0	19·5	98·0	53·4	44·6	77·1	79·9	72·4	−0·2
	Sholapur	...	28·308	28·170	·138	28·241	−·007	·748	90·1	68·2	21·9	108·9	52·2	56·7	82·6	89·8	79·2	+0·2
	Poona	...	·059	27·946	·113	·006	−·007	·762	89·6	65·0	24·6	107·5	49·9	57·6	81·0	85·8	76·3	+0·5
	Akola	...	·939	28·800	·139	·867	−·014	·736	92·5	68·2	24·3	113·2	46·5	66·7	83·4	90·8	80·0	+1·0

II.

at 89 Stations in India, Burma, etc., in the year 1894.

Temperature, Wet-bulb.				Vapour tension.					Humidity.					Cloud.				Rain-fall.	Station.	Meteorological Province.
Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Total rainfall for the year.		
74·6	78·4	78·3	77·1	·823	·909	·895	·876	−·010	88	79	77	81	−1	6·6	6·5	6·6	+1·3	...	Port Blair.	Burma Coast and Bay Island.
70·5	75·3	75·5	73·7	·728	·800	·757	·762	−·022	89	75	65	76	−2	5·0	5·5	5·3	−0·1	...	Rangoon.	
73·3	75·6	75·6	74·8	·780	·811	·805	·799	−·014	84	75	74	78	−2	5·8	6·1	6·0	+1·1	...	Diamond Island.	
71·2	76·9	76·4	74·8	·708	·857	·843	·803	?	77	77	77	77	?	4·8	5·0	4·9	?	31·98	Cocos Island.	
69·2	75·0	76·9	74·0	·702	·844	·855	·800	+·029	88	80	76	81	+3	5·0	4·7	4·9	+0·3	...	Akyab.	
68·9	72·8	74·0	71·2	·673	·757	·737	·722	+·011	94	78	65	79	0	6·1	5·8	6·0	+0·6	...	Silchar	Assam.
65·5	70·9	73·4	69·9	·655	·743	·758	·719	+·017	97	87	72	85	+1	6·0	4·9	5·5	−1·3	...	Sibsagar.	
66·3	70·9	72·8	70·2	·667	·721	·713	·700	+·013	92	79	67	80	+2	4·8	4·4	4·6	+0·7	...	Dhubri.	
68·5	74·9	75·3	72·9	·707	·811	·811	·777	+·028	95	78	75	82	+2	5·1	4·8	5·0	+0·5	...	Chittagong	Bengal and Orissa.
68·6	74·1	74·4	72·4	·695	·784	·752	·743	−·012	88	76	66	76	−1	5·3	5·2	5·3	+0·8	...	Narayanganj.	
69·0	73·5	73·5	72·0	·710	·753	·705	·723	−·032	90	70	60	74	−4	4·5	4·5	4·5	+0·1	...	Calcutta (Alipore).	
69·7	71·9	?	?	·736	·802	?	?	?	93	71	?	?	?	?	?	?	?	54·12	Ditto (Chowringhee),	
71·3	76·2	76·3	74·6	·758	·852	·840	·817	−·008	87	77	73	79	−1	5·9	5·6	5·8	+0·1	...	Saugor Island.	
68·7	72·3	73·0	71·3	·703	·703	·658	·689	−·003	88	65	53	69	0	4·5	5·2	4·9	+0·5	...	Burdwan.	
67·3	73·2	73·6	71·4	·657	·748	·690	·698	+·004	84	70	58	71	−4	4·3	4·9	4·6	−0·3	...	Berhampore.	
71·2	76·1	76·0	74·4	·770	·832	·824	·809	+·015	94	74	73	80	−1	5·5	5·4	5·5	+0·8	...	False Point.	
70·8	74·3	74·8	73·3	·740	·731	·693	·721	+·002	88	62	53	67	−3	3·5	4·5	4·0	−0·1	...	Cuttack.	
59·2	66·5	67·0	64·2	·446	·530	·506	·494	+·012	66	56	50	57	+1	5·2	6·4	5·7	+1·2	...	Hazaribagh	Gangetic Plain and Chota Nagpur.
65·8	71·4	72·0	69·7	·619	·670	·632	·641	+·015	81	63	54	66	+1	4·1	4·1	4·1	+0·1	...	Patna.	
67·4	71·9	72·8	70·7	·684	·708	·674	·689	+·017	91	69	58	73	+2	3·4	3·0	3·2	+0·4	...	Darbhanga.	
64·0	70·6	71·3	68·6	·572	·627	·583	·596	+·022	80	59	48	62	+1	4·2	4·4	4·3	+1·1	...	Allahabad.	
66·9	71·1	71·5	69·9	·649	·645	·610	·634	+·072	81	60	51	64	+8	3·4	3·7	3·6	+0·7	62·77	Ghazipur.	
63·7	69·7	70·3	68·5	·577	·604	·562	·591	?	81	58	48	62	?	4·2	4·3	4·3	+0·8	...	Lucknow.	
57·5	64·1	65·1	62·2	·458	·518	·511	·495	?	79	64	58	67	?	4·5	5·2	4·9	+1·0	...	Dehra Dun	Upper Sub-Himalayas.
56·6	64·4	65·7	62·2	·447	·510	·506	·366	?	81	61	55	66	?	?	?	?	?	120·37	Dehra Forest School.	
60·5	67·2	68·4	65·4	·520	·573	·533	·542	+·052	83	63	49	65	+7	3·8	3·6	3·7	+0·7	...	Roorkee.	
61·5	66·5	67·9	65·3	·550	·537	·504	·530	+·020	86	57	45	63	+5	3·7	3·4	3·6	+0·6	...	Meerut.	
59·2	66·5	68·7	64·8	·493	·542	·525	·520	+·033	77	57	45	60	+9	3·1	3·0	3·1	+0·4	...	Lahore.	
60·8	67·0	68·6	65·5	·529	·560	·539	·542	+·041	83	59	48	64	+6	4·4	4·7	4·6	+1·2	...	Ludhiana.	
54·8	63·0	64·6	60·8	·416	·466	·424	·435	+·009	72	51	38	53	0	3·0	3·9	3·5	+0·3	...	Peshawar	Indus Valley and N.-W. Rajputana.
60·3	67·4	71·0	66·2	·498	·559	·559	·539	+·003	72	51	39	54	0	2·1	2·3	2·2	+0·6	...	Mooltan.	
57·4	68·0	69·4	64·9	·429	·510	·448	·462	0	58	41	29	43	−1	1·9	2·1	2·0	+0·1	...	Jacobabad.	
66·0	73·1	73·7	70·9	·621	·725	·727	·691	?	76	62	60	66	?	3·6	2·9	3·3	?	...	Kurrachee.	
59·3	66·6	68·1	64·7	·476	·505	·479	·487	+·023	72	48	39	53	+3	3·6	4·5	4·1	+0·8	...	Jeypore	East Rajputana, Central India and Gujarat.
59·6	66·7	69·6	65·3	·478	·535	·544	·519	+·040	72	55	46	57	+6	2·7	3·2	3·0	+0·3	...	Ajmere.	
61·7	68·4	69·1	66·4	·521	·515	·441	·492	+·008	73	46	33	50	+5	3·3	3·0	3·2	−0·2	...	Deesa.	
62·4	68·4	69·5	66·8	·520	·560	·529	·517	?	81	57	47	60	?	4·1	5·0	4·6	+0·5	...	Nowgong.	
61·7	68·4	69·7	66·6	·515	·549	·524	·529	+·029	73	52	43	56	+5	3·5	4·0	3·8	+1·1	...	Agra.	
61·7	66·2	67·1	65·0	·531	·514	·515	·520	−·003	88	57	54	66	+3	4·6	5·3	5·0	+0·3	...	Belgaum	Deccan.
62·2	68·1	69·5	66·6	·501	·514	·472	·495	+·007	71	47	36	51	+1	4·3	5·6	5·0	+0·1	...	Sholapur.	
61·4	66·7	67·6	65·2	·515	·487	·457	·486	−·003	81	48	41	57	+4	4·1	4·8	4·5	−0·1	...	Poona.	
62·9	69·8	71·4	68·0	·528	·561	·515	·536	+·036	75	51	39	55	+4	3·2	4·6	3·9	+0·2	...	Akola.	

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M.

Meteorological Province.	Station.	Elevation of Bar-Cistern above sea level in feet.	Pressure.						Temperature of air.									
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to sea level and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.
Deccan	Buldana	2,132	27·744	27·635	·109	27·687	−·018	29·726	87·0	67·6	19·4	106·4	53·1	53·3	80·1	84·9	76·9	−0·1
	Khandwa	...	28·814	28·688	·126	28·748	−·015	·737	90·8	67·9	22·9	111·7	44·1	67·6	81·4	88·8	78·7	+0·6
	Hoshangabad	...	·821	·693	·128	·755	?	·722	89·5	69·1	20·4	111·1	44·8	66·3	81·4	88·0	78·8	?
	Nagpur	...	·827	·698	·129	·760	−·007	·727	91·2	69·2	22·0	115·2	47·0	68·2	83·0	88·4	79·6	+0·2
	Jubbulpore	...	28·522	28·401	·121	28·458	−·011	·731	87·7	65·5	22·2	110·7	40·9	69·8	79·4	84·9	75·7	+0·4
	Saugor	...	·088	27·980	·108	·031	−·004	·724	87·4	66·8	20·6	109·8	44·0	65·8	80·2	85·1	76·3	+0·7
	Raipur	...	·879	28·750	·129	·812	−·012	·711	90·4	70·1	20·3	114·2	49·6	64·6	82·6	88·1	79·8	+0·9
	Sutna	...	·788	·674	·114	·727	−·018	·721	87·6	67·3	20·3	112·1	41·2	70·9	81·0	84·8	77·0	?
	Hyderabad (Deccan)	...	·204	·080	·124	·142	?	·751	89·5	69·1	20·4	107·3	51·7	55·6	81·8	86·6	78·6	?
West Coast	Bombay	...	29·875	29·773	·102	29·820	−·003	·797	85·6	75·0	10·6	93·0	64·0	29·0	80·9	82·7	79·5	0
	Ratanagiri	...	·803	·701	·102	·747	+·001	·794	87·4	73·7	13·7	97·5	62·3	35·2	83·9	83·6	79·5	+0·3
	Karwar	...	·886	·782	·104	·830	−·002	·805	86·6	73·0	13·6	93·3	62·1	31·2	81·7	83·9	79·1	+0·5
	Cochin	...	·931	·840	·091	·881	−·004	·818	88·0	74·6	13·4	98·3	67·8	30·5	83·0	84·7	80·5	+0·2
South India	Salem	...	28·995	28·853	·142	28·932	−·019	·795	93·1	71·3	21·8	105·1	57·3	47·8	83·9	89·5	80·4	+0·9
	Mysore	...	27·439	27·320	·119	27·380	?	·785	86·0	65·3	20·7	95·9	52·9	43·0	77·5	82·6	74·8	?
	Mercara	...	26·242	26·153	·089	26·206	−·002	·833	75·4	61·7	13·7	85·6	51·0	34·6	69·5	71·5	67·6	−0·1
	Bangalore	...	·942	·830	·112	·891	−·022	·766	84·6	63·9	20·7	97·1	52·1	45·0	76·4	81·3	73·5	+0·2
	Hassan	...	·886	·783	·103	·840	?	·792	82·0	62·0	20·0	94·0	47·0	47·0	75·8	78·3	71·1	?
	Chitaldroog	...	27·524	27·406	·118	27·468	?	·764	86·0	66·9	19·1	98·4	53·0	45·4	78·2	83·7	75·9	?
	Trichinopoly	...	29·657	29·515	·142	29·594	−·017	·778	95·0	74·5	20·5	106·8	60·3	46·5	87·5	91·9	83·4	+1·1
	Madras	...	·885	·773	·112	·833	−·009	·784	91·5	74·7	16·8	109·7	60·6	49·1	86·2	85·9	81·8	+0·1
	Bellary	...	28·438	28·300	·138	28·371	−·005	·766	93·4	70·4	23·0	105·0	55·9	49·1	83·2	89·3	81·7	−0·3
	Vizagapatam	...	29·842	29·728	·114	29·783	−·014	·751	85·4	78·8	6·6	95·5	64·9	31·6	83·2	84·6	82·5	−0·2
	Cocanada	...	·855	·731	·124	794	?	·754	89·0	74·6	14·4	109·1	59·6	49·5	84·1	86·9	81·3	?
Hill Station, Baluchistan.	Quetta	...	24·622	24·548	·074	24·578	−·001	?	72·0	44·0	28·0	97·3	14·9	82·4	64·0	68·8	57·2	−1·0
Hill Stations, Northern India.	Leh	11,503	19·686	19·603	·083	19·651	−·011	?	54·4	29·9	24·5	85·4	−9·5	94·9	44·4	49·3	41·2	+0·1
	Srinagar	...	24·884	24·795	·089	24·832	?	?	64·2	44·5	19·7	89·3	19·1	70·2	54·5	63·1	54·1	?
	Murree	...	23·828	23·792	·036	23·802	−·020	?	64·0	51·1	12·9	92·0	24·5	67·5	59·1	59·7	56·5	−0·4
	Chamba	3,005	26·875	26·789	·086	26·840	−·018	?	76·1	56·8	19·3	104·6	32·0	72·6	66·6	72·1	64·4	−0·9
	Kailang	10,037	20·792	20·722	·070	20·760	0	?	53·3	31·6	21·7	81·2	−1·0	82·2	44·9	48·8	40·4	−0·3
	Simla (Ridge)	...	23·097	23·051	·046	23·066	−·014	?	60·2	49·7	10·5	83·4	28·0	55·4	56·1	57·3	54·2	−1·1
	Chakrata	...	·321	·262	·059	·284	−·008	?	62·9	49·7	13·2	85·3	28·9	56·4	58·5	59·2	55·4	−0·5
	Ranikhet	...	24·096	24·026	·070	24·049	−·001	?	66·9	53·5	13·4	88·4	32·4	56·0	62·1	63·5	59·3	−0·4
	Katmandu	4,338	25·599	25·512	·087	25·554	−·019	?	76·8	54·6	22·2	94·4	31·2	63·2	67·0	71·1	64·1	−0·9
	Darjeeling	...	22·977	22·898	·079	22·935	−·008	?	58·2	48·2	10·0	71·9	31·2	40·7	54·9	55·5	52·5	+0·7
	Demagri	?	?	?	?	?	?	?	83·6	60·6	23·0	93·9	48·1	45·8	69·0	75·8	70·1	+1·3
	Tura	3,943	?	?	?	?	?	?	81·5	68·0	13·5	96·9	50·4	46·5	76·0	78·5	74·0	?
Hill Stations, Central India.	Mount Abu	...	26·032	25·957	·075	25·990	−·026	?	74·2	61·4	12·8	92·4	41·1	51·3	69·9	72·1	67·3	−1·2
	Pachmarhi	...	·443	26·351	·092	26·394	+·002	?	79·2	62·2	17·0	99·7	39·5	60·2	73·7	76·6	70·2	+0·7
	Chikalda	3,642	·318	·226	·092	·269	−·016	?	78·6	64·3	14·3	99·2	52·4	46·8	72·6	76·5	71·0	−0·2
Hill Stations, South India.	Wellington	...	24·254	24·178	·076	24·216	−·009	?	70·8	52·7	18·1	81·2	37·1	44·1	66·8	65·6	60·5	−0·6

II—contd.

at 89 Stations in India, Burma, etc., in the year 1894—contd.

Temperature, Wet-bulb.				Vapour Tension.					Humidity.					Cloud.				Total rainfall for the year.	Station.	Meteorological Province.
Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.			
61·1	66·5	67·0	64·9	·471	·492	·450	·472	−·003	69	50	41	53	+1	3·2	4·4	3·8	−0·2	40·31	Buldana . .	Deccan—contd.
61·6	68·6	69·9	66·7	·497	·554	·509	·520	+·019	71	53	41	55	+2	3·6	4·3	4·0	+0·6	...	Khandwa.	
63·6	70·3	71·9	68·6	·545	·620	·594	·586	?	75	60	49	62	?	4·3	5·1	4·7	?	...	Hoshangabad.	
62·9	70·1	71·1	68·0	·518	·588	·556	·554	+·034	72	54	45	57	+4	3·9	5·2	4·6	+0·1	...	Nagpur.	
61·9	68 3	69·6	66·6	·540	·571	·550	·553	+·051	83	59	49	64	+6	4·1	4·7	4·4	+0·4	...	Jubbulpore.	
60·8	67·4	68·7	65·6	·483	·529	·511	·508	+·056	72	54	46	57	+7	3·4	3·9	3·7	+0·9	...	Saugor.	
64·0	70·2	71·0	68·4	·540	·587	·547	·557	+·010	72	54	44	57	0	4·3	5·2	4·8	+0·8	...	Raipur.	
61·2	68·4	68·8	66·1	·500	·561	·525	·529	+·072	72	55	47	58	+8	3·3	3·9	3·6	+0·4	...	Sutna.	
64·8	70·0	70·4	68·4	·571	·593	·548	·571	?	80	56	46	61	?	4·0	4·5	4·3	?	...	Hyderabad. (Deccan).	
70·8	74·5	75·5	73·6	·707	·779	·791	·759	−·019	81	73	71	75	−2	4·1	3·9	4·0	−0·3	...	Bombay . .	West Coast.
70·1	75·1	76·5	73·9	·701	·764	·824	·763	+·024	83	66	72	74	+2	3·9	4·3	4·1	+1·1	...	Ratnagiri.	
71·1	74·6	76·0	74·0	·740	·768	·794	·774	?	89	71	69	77	?	3·3	3·8	3·6	−0·2	...	Karwar.	
72·6	76·0	77·0	75·2	·777	·810	·825	·804	−·010	90	72	70	77	−3	3·7	5·0	4·4	−0·3	...	Cochin.	
68·8	73·0	73·6	71·8	·678	·671	·622	·657	−·035	88	58	46	64	−4	4·6	6·2	5·4	+1·0	...	Salem . .	South India.
63·9	68·8	69·4	67·4	·584	·600	·559	·581	?	93	63	52	69	?	4·8	5·2	5·0	?	...	Mysore.	
59·8	64·5	66·0	63·5	·496	·555	·582	·544	+·008	89	77	76	81	+1	6·1	6·5	6·3	−0·2	...	Mercara.	
62·0	67·5	67·6	65·7	·539	·576	·521	·546	+·014	90	64	51	68	+1	5·0	4·3	4·7	+0·1	...	Bangalore.	
58·5	66·8	67·4	64·2	·458	·557	·549	·521	?	81	63	59	68	?	5·6	6·5	6·1	?	...	Hassan.	
60·9	67·4	67·4	65·2	·466	·542	·474	·494	?	70	57	43	57	?	4·7	5·4	5·1	?	...	Chitaldroog.	
70·3	74·0	74·7	73·0	·689	·661	·631	·660	−·037	81	51	44	59	−5	4·1	5·0	4·6	−1·2	...	Trichinopoly.	
?	76·4	77·0	75·8	?	·785	·816	·818	+·045	?	64	66	76	+3	4·8	4·7	4·8	−0·1	...	Madras.	
64·8	69·8	70·3	68·3	·551	·564	·509	·542	+·001	74	50	39	54	+2	5·6	6·5	6·1	+1·2	...	Bellary.	
71·1	75·6	76·6	74·4	·666	·802	·826	·765	−·005	68	69	68	69	+1	4·6	4·9	4·8	+0·8	...	Vizagapatam.	
72·1	76·1	77·1	75·1	·768	·801	·808	·792	?	88	69	64	74	?	3·5	3·5	3·5	?	...	Cocanada.	
39·9	50·4	52·0	47·5	·226	·254	·240	·240	−·013	74	43	36	51	+1	2·1	2·8	2·5	+0·3	...	Quetta . .	Hill Station, Baluchistan.
26·9	34·9	37·5	33·1	·145	·150	·152	·149	+·017	77	48	44	56	+7	5·3	5·9	5·6	+0·3	9·14	Leh. . .	Hill Stations, Northern India.
43·6	51·0	57·0	50·5	·309	·386	·456	·384	?	93	80	71	82	?	4·8	4·8	4·8	?	...	Srinagar.	
44·1	50·1	51 0	48·4	·243	·302	·321	·289	+·008	61	57	60	59	+3	5·1	5·5	5·3	+0·6	...	Murree.	
53·5	58 4	60·8	57·5	·404	·430	·436	·423	+·019	81	63	55	66	+7	5·2	6·2	5·7	+0·9	80·41	Chamba.	
29·8	37·7	39·4	35·7	·174	·202	·192	·189	+·008	85	60	52	66	+4	5·0	6·3	5·7	+0 1	38·79	Kailang.	
44·3	48·7	50·3	47·8	·257	·291	·315	·287	−·008	67	61	64	64	+3	5·2	6·2	5·7	+0·8	...	Simla (Ridge).	
45·7	51·4	52·4	49·8	·286	·331	·346	·323	+·028	75	65	67	69	+6	5·0	6·1	5·6	+0·9	...	Chakrata.	
49·8	54·6	55·6	53·3	·340	·372	·382	·365	+·024	79	65	64	69	+6	4·9	5·5	5·2	+0·8	...	Ranikhet.	
53·0	60·1	62·1	58·4	·417	·469	·476	·455	+·009	89	69	60	73	+2	4·8	5·7	5·3	+0·8	51·23	Katmandu.	
46·5	52·2	52·7	50·4	·318	·381	·386	·362	+·010	88	84	84	85	+1	7·3	7·8	7·6	+1·0	...	Darjeeling.	
?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	140·98	Demagiri.	
?	69·3	70·1	?	?	·659	·656	?	?	?	72	68	?	?	5·5	5·8	5·7	+1·2	114·02	Tura.	
54·6	59 5	60·9	58·3	·365	·404	·470	·396	+·038	66	56	55	59	+8	3·6	3·6	3·6	−0·1	...	Mount Abu .	Hill Stations, Central India.
56·0	61·9	62·8	60·2	·398	·429	·425	·418	+·006	70	54	50	58	+1	4·2	4·8	4·5	+0·4	...	Pachmarhi.	
58·0	62·4	65·6	61·3	·423	·456	·447	·442	+·008	70	60	53	61	+2	4·8	5·7	5·3	+1·0	78·60	Chikalda . .	
50·7	58·3	58·7	55·9	·357	·404	·426	·396	+·006	88	62	68	73	+1	5·2	6·8	6·0	+0·3	...	Wellington .	Hill Stations, South India.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M.

Meteorological Province.	Station.	Elevation of bar-cistern above sea level in feet.	Pressure.						Temperature of Air.									
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to sea level and to gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.
Extra India . .	Muscat . .	...	29·852	29·772	·080	29·812	?	?	83·2	78·8	4·4	102·3	57·9	44·4	82·0	82·5	80·9	?
	Aden . .	...	·829	·699	·130	·760	−·018	29·786	88·2	77·9	10·3	99·5	68·4	31·1	84·1	85·8	82·5	+0·5
	Perim . .	...	·671	·557	·114	·610	?	?	89·8	79·6	10·2	99·5	68·9	30·6	86·1	86·3	83·8	?
	Minicoy . .	...	·951	·856	·095	·901	?	·835	87·1	?	?	?	?	?	83·5	84·1	?	?
	Zanzibar . .	...	·985	·887	·098	·940	?	·935	83·5	76·2	7·3	89·2	68·5	20·7	79·8	82.7	79·7	?
	Port Victoria (Seychelles).	...	·983	·902	·081	·938	?	·896	82·2	76·5	5·7	86·4	70·7	15·7	80·6	81·0	79·1	

II—concld.

at 89 stations in India, Burma, etc., in the year 1894—concld.

Temperature Wet-Bulb.				Vapour tension.					Humidity.					Cloud.				Rain-fall.	Station.	Meteorological Province.
Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	From minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Total rainfall for the year.		
70·0	74·4	75·0	73·1	·633	·770	·788	·731	?	64	69	70	68	P	1·3	1·5	1·4	P	...	Muscat . .	Extra India.
72·0	75·9	75·2	74·4	·712	·794	·739	·748	0	74	68	60	67	−1	2·9	1·1	2·0	−0·6	...	Aden.	
70·4	76·8	76·5	74·6	·631	·802	·788	·740	P	63	64	63	63	P	2·3	1·9	2·1	?	...	Perim.	
74·6	77·4	77·6	76·6	P	·862	·861	?	P	P	75	74	P	P	4·9	5·4	5·2	?	...	Minicoy.	
73·5	75·5	75·7	74·9	·792	·828	·798	·806	P	88	81	71	80	?	4·5	3·7	4·1	?	...	Zanzibar.	
72·6	74·9	75·1	74·2	·748	·791	·792	·777	P	82	76	75	77	P	6·2	6·6	6·4	?	55·71	Port Victoria (Seychelles).	

G. I. C. P. O.—No. 1 Meteor.—14-8-95.—377.

EXPLANATION OF PLATES.

PLATE I.—A chart of India showing the 11 meteorological provinces and 51 districts of India.

PLATE II.—A chart of India showing the variation of the rainfall of the months of January and February 1894 from the normal. This chart and the three following charts have been prepared to illustrate the data given in Table XIX. These charts are drawn up in the same manner as the rainfall chart (Plate V) in the Monthly Weather Reviews of the year 1894.

PLATE III.—A chart of India showing the variation of the rainfall of the month of March to May 1894 from the normal.

PLATE IV.—A chart of India showing the variation of the rainfall of the months of June to October 1894 from the normal.

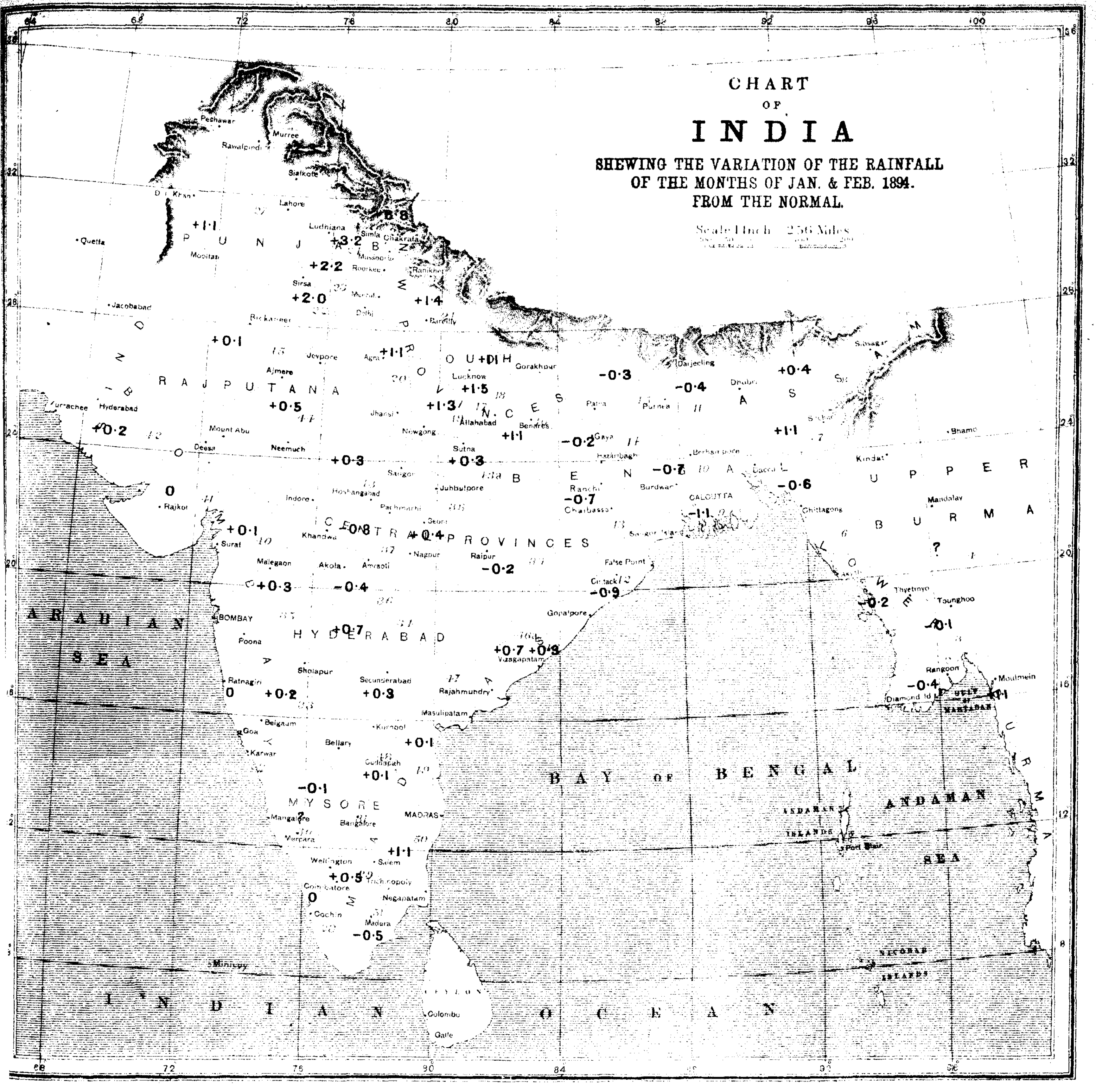
PLATE V.—A chart of India showing the variation of the rainfall of the months of November and December 1894 from the normal.

PLATE VI.—Chart showing the tracks of the more important cyclonic storms of 1894 in the Indian area during the south-west monsoon, a brief summary of which is given on pages 613 to 615.

Explanation.

The name of the districts can be at once ascertained by referring in the following list to the number given near the right hand boundary of each district in small slanting figures.

1. Tenasserim	14 Behar (South)	27. Punjab (West)	40. Gujarat
2. Lower Burma	15. Do. (North)	28. Malabar	41. Kathiawar
3. Central do.	16. North Western Provinces (East)	29. Madras (South Central)	42. Sind
4. Upper do.	17. Oudh (South)	30. Coorg	43. Central India (East)
5. Arakan	18. Do. (North)	31. Mysore	44. Rajputana (East) Central India (West)
6. Eastern Bengal	19. North Western Provinces (Central).	32. Konkan	45. Rajputana (West)
7. Assam (Surma)	20. Do. do. (West)	33. Bombay Deccan	46. East Coast (North)
8. Do. (Brahmaputra)	21. Do. do (Submontane)	34. Hyderabad (North)	46(a). Do. do. (a)
9. Deltaic Bengal	22. Punjab (South)	35. Khandeish	47. Hyderabad (South)
10. Central do.	23. Do. (Central)	36. Berar	48. Madras (Central)
11. North do.	24. Do. (Submontane)	37. Central Provinces (West)	49. East Coast (Central)
12. Orissa	25. Do. (Hill Districts)	38. Do. (Central)	50. East Coast (South)
13 Chota Nagpore	26. Do. (North West)	39. Do. (East)	51. Madras (South)



Explanation.

The Chart gives the variations of the rainfall of the month (to tenths of an inch) from the normal over the whole of India and Burma with the exception of Upper Burma, for which rainfall data have not been obtained for a sufficient number of years to furnish reliable and useful means. The country is divided into 51 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character; and the means (both actual and normal for the month) have been calculated, and the numbers given in the centre of each division (usually with a + or − sign attached) give the difference between the actual and normal mean rainfall of the district of the month. A plus sign indicates that the rainfall was in excess, and a negative sign that it was in defect by the amounts indicated by the numbers to which the signs are attached. The name of the districts can be at once ascertained by referring in the following list to the number given near the right hand boundary of each district in small slanting figures.

1. **Tenasserim**
2. **Lower Burma**
3. **Central do.**
4. **Upper do.**
5. **Arakan**
6. **Eastern Bengal**
7. **Assam (Surma)**
8. Do. **(Brahmaputra)**
9. **Deltaic Bengal**
10. Central do.
11. **North** do.
12. **Orissa**
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. **North Western Provinces (East)**
17. **Oudh (South)**
18. Do. (North)
19. **North Western Provinces** (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. **Punjab (South)**
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. **Malabar**
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. **Khandeish**
36. **Berar**
37. **Central Provinces (West)**
38. Do. (Central)
39. Do. **(East)**
40. **Gujarat**
41. **Kathiawar**
42. **Sind**
43. **Central India (East)**

43(a). Do. do. (a)

44. **Rajputana (East)** Central India (West)
45. Rajputana (West)
46. East Coast (North)

46(a). Do. do. (a)

47. **Hyderabad (South)**
48. **Madras (Central)**
49. **East Coast (Central)**
50. **East Coast (South)**
51. **Madras (South)**

Explanation.

The Chart gives the variations of the rainfall of the month (to tenths of an inch) from the normal over the whole of India and Burma with the exception of Upper Burma, for which rainfall data have not been obtained for a sufficient number of years to furnish reliable and useful means. The country is divided into 51 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character; and the means (both actual and normal for the month) have been calculated, and the numbers given in the centre of each division (usually with a + or − sign attached) give the difference between the actual and normal mean rainfall of the district of the month. A plus sign indicates that the rainfall was in excess, and a negative sign that it was in defect by the amounts indicated by the numbers to which the signs are attached. The name of the districts can be at once ascertained by referring in the following list to the number given near the right hand boundary of each district in small slanting figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Gujarat
41. Kathiawar
42. Sind
43. Central India (East)
43(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

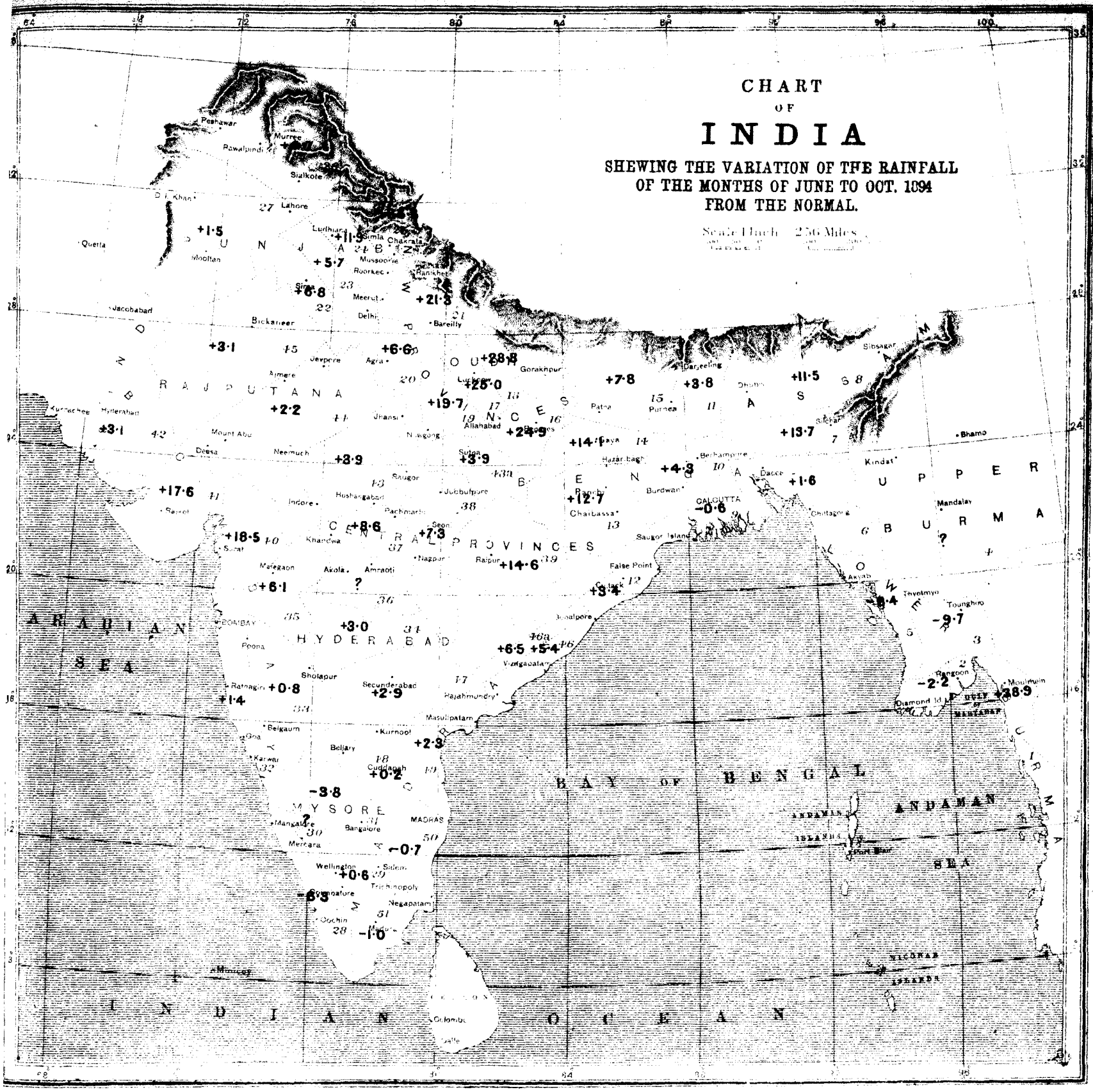
Reg. No. 166, Wn., 1.—June 96.—410

Photo. S. I. O. Calcutta.

CHART
OF
INDIA

SHEWING THE VARIATION OF THE RAINFALL OF THE MONTHS OF JUNE TO OCT. 1894 FROM THE NORMAL.

Scale 1 Inch = 256 Miles.



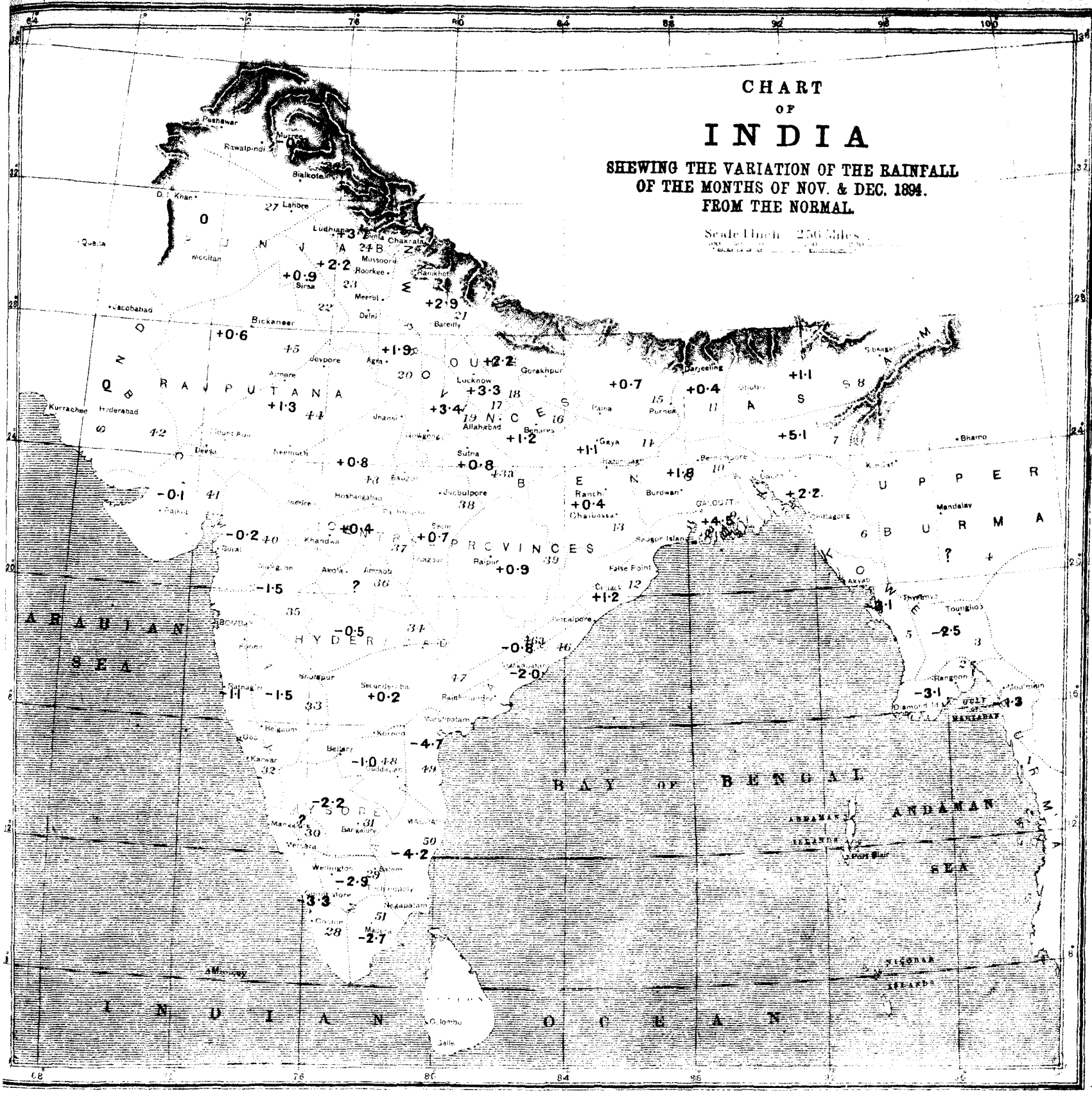
Explanation.

The Chart gives the variations of the rainfall of the month (to tenths of an inch) from the normal over the whole of India and Burma with the exception of Upper Burma, for which rainfall data have not been obtained for a sufficient number of years to furnish reliable and useful means. The country is divided into 51 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character; and the means (both actual and normal for the month) have been calculated, and the numbers given in the centre of each division (usually with a + or − sign attached) give the difference between the actual and normal mean rainfall of the district of the month. A plus sign indicates that the rainfall was in excess, and a negative sign that it was in defect by the amounts indicated by the numbers to which the signs are attached. The name of the districts can be at once ascertained by referring in the following list to the number given near the right hand boundary of each district in small slanting figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Gujarat
41. Kathiawar
42. Sind
43. Central India (East)
43(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

Reg No. 146. Wr., I.—June 95.—410.

Zinco., S. I. O. Calcutta.



Explanation.

The Chart gives the variations of the rainfall of the month (to tenths of an inch) from the normal over the whole of India and Burma with the exception of Upper Burma, for which rainfall data have not been obtained for a sufficient number of years to furnish reliable and useful means. The country is divided into 51 areas, over each of which the meteorological conditions are fairly uniform, and the staple crops similar in character; and the means (both actual and normal for the month) have been calculated, and the numbers given in the centre of each division (usually with a + or − sign attached) give the difference between the actual and normal mean rainfall of the district of the month. A plus sign indicates that the rainfall was in excess, and a negative sign that it was in defect by the amounts indicated by the numbers to which the signs are attached. The name of the districts can be at once ascertained by referring in the following list to the number given near the right hand boundary of each district in small slanting figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Gujarat
41. Kathiawar
42. Sind
43. Central India (East)
43(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

Mem. No. 146, Wr., I.—June 96.—41C. Zinco. S I.O Calcutta.

TRACKS OF CYCLONIC STORMS OF 1894 in the INDIAN AREA During the South West Monsoon.

64° 68° 72° 76° 80° 84° 88° 92° 96° 100°

32° 28° 24° 20° 16° 12° 8° 4°

18th June
17th July.
10th July
9th July
24th July
23rd July
14th July
17th June
22nd July
21st July
13th July
20th July
26th Oct.
25th Oct.
24th Oct.
23rd Oct.
8th July
5th July
5th Oct.
24th June
18th Aug.
17th Aug.
30th Sep.
16th June
20th Sep.
19th July
28th Sep.
4th July
3rd July.
15th Aug.
14th Aug.
26th July
23rd June
18th June
25th July
3rd Oct
22nd June
18th July
12th July
21st June
24th Sep
14th June
13th June
24th July
17th July
2nd Oct
16th July
11th July
2nd Nov
1st Nov.
31st Oct.
30th Oct.
29th April
28th April
27th April

Storms originating in the Indian Area, thus _____

Land-formed Storm ..... ,, ...

Reg. No. 235, Wr.. I.—July 95.—387.

Litho., S. I. O., Calcutta

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT

MONTHLY WEATHER REVIEW,

JANUARY 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by authority of the Government of India.

CALCUTTA:

OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.

1894.

Price One Rupee.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW,

FEBRUARY 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by authority of the Government of India.

CALCUTTA:

OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.

1894.

Price One Rupee.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW,

MARCH 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by authority of the Government of India.

CALCUTTA:

OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.

1894.

Price One Rupee.

GOVERNMENT OF INDIA.
METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

APRIL 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by Authority of the Government of India.

CALCUTTA:
OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1894.

Price One Rupee.

GOVERNMENT OF INDIA.
METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW,

MAY 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by Authority of the Government of India.

CALCUTTA:
OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1894.

Price One Rupee.

GOVERNMENT OF INDIA.
METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW,

JUNE 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by Authority of the Government of India.

CALCUTTA:
OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.

1894

Price One Rupee.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW,

JULY 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by authority of the Government of India.

CALCUTTA:

OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.

1894.

Price One Rupee.

GOVERNMENT OF INDIA.
METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW,

AUGUST 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by Authority of the Government of India.

CALCUTTA:
OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1894.

Price One Rupee.

GOVERNMENT OF INDIA.
METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW,

SEPTEMBER 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by Authority of the Government of India.

CALCUTTA:
OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1895.

Price One Rupee.

GOVERNMENT OF INDIA.
METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW,

OCTOBER 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by Authority of the Government of India.

CALCUTTA:
OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1895.

Price One Rupee.

GOVERNMENT OF INDIA.
METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW,

NOVEMBER 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by Authority of the Government of India.

CALCUTTA:
OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1895.

Price One Rupee.

GOVERNMENT OF INDIA.
METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW,

DECEMBER 1894.

CONTENTS.

BY

JOHN ELIOT, M.A.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by Authority of the Government of India.

CALCUTTA:
OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1895.

Price One Rupee.

GOVERNMENT OF INDIA.
METEOROLOGICAL DEPARTMENT.

INDIA WEATHER REVIEW.

ANNUAL SUMMARY, 1894.

CONTENTS:

BY

JOHN ELIOT, M.A., F.R.S.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

Published by authority of the Government of India.

CALCUTTA:
OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1895.

Price One Rupee.